

**HEALTH SERVICES AND DEVELOPMENT AGENCY MEETING
FEBRUARY 26, 2014
APPLICATION SUMMARY**

NAME OF PROJECT: Methodist Healthcare-Memphis Hospital dba West Cancer Center

PROJECT NUMBER: CN1311-043

ADDRESS: 7945 Wolf River Boulevard
Germantown (Shelby County), TN 38138

LEGAL OWNER: Methodist Healthcare-Memphis Hospitals
1407 Union Avenue, Suite 300
Memphis (Shelby County), TN 38104

OPERATING ENTITY: Not Applicable

CONTACT PERSON: Carol Weidenhoffer
(901) 516-0679

DATE FILED: November 13, 2013

PROJECT COST: \$60,554,193.00

FINANCING: Cash Reserves of Methodist Healthcare

PURPOSE FOR FILING: Construction of a hospital building in excess of \$5.0 million, acquisition of major medical equipment costing greater than \$2.0 million

Methodist Healthcare-Memphis Hospital dba West Cancer Center is seeking approval for the establishment of a 109,285 square foot comprehensive cancer center to be operated as an outpatient department of Methodist Healthcare. The proposed project will be located on 9.63 acres at 7945 Wolf River Boulevard, Germantown (Shelby County), TN 38138. The project will also include the relocation of a linear accelerator, positron emission tomography/computed tomography (PET/CT), magnetic resonance imaging (MRI) and computed tomography (CT) services and equipment, to replace MRI equipment, to acquire an additional linear accelerator and to establish ambulatory operating rooms.

SERVICE SPECIFIC CRITERIA AND STANDARD REVIEW

**CONSTRUCTION, RENOVATION, EXPANSION, AND REPLACEMENT OF
HEALTH CARE INSTITUTIONS**

1. Any project that included the addition of Beds, Services, or Medical Equipment will be reviewed under the standards for those specific activities

The applicant's response to the Standards and Criteria for Linear Accelerator services is included in the application.

2. For relocation or replacement of an existing licensed health care institution:
 - a. The applicant should provide plans which include costs for both renovation and relocation, demonstrating the strengths and weaknesses of each alternative

There is insufficient space for renovation at the applicant's multiple ambulatory cancer centers. These sites are located within a 4 mile radius of the proposed site. The consolidation of services into an integrated comprehensive cancer center is needed as well as the expansion of hospital-based diagnostic and therapeutic services. The proposed project's goal is to minimize the fragmentation of cancer care in the Memphis service area that can lead to patient dissatisfaction and anxiety, unnecessary costs, and duplication of services at multiple sites.

It appears that this criterion has been met.

- b. The applicant should demonstrate that there is an acceptable existing or projected future demand for the proposed project.

The demand for linear accelerator services will be discussed in the following sections.

3. For renovation or expansions of an existing licensed health care institution:
 - a. The applicant should demonstrate that there is an acceptable existing demand for the proposed project

The applicant provided the following response:

- *The 65+ population will account for 85% of the total population growth and will need health and cancer care*

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- *The three (3) Tennessee counties in the service area have higher cancer incidence rates than national averages for all cancers.*

It appears that this criterion has been met.

b. The applicant should demonstrate that the existing physical plant's condition warrants major renovation or expansion

The original building was designed for medical offices and multiple tenants. Renovation and construction is needed for the building to develop a comprehensive cancer center that provides adequate space, improves work flows and improves collaboration with oncologists, radiologists, surgeons, and patients.

It appears that this criterion has been met.

MEGAVOLTAGE RADIATION THERAPY SERVICE

Standards and Criteria

1. Utilization Standards for MRT Units.

a. Linear Accelerators not dedicated to performing SRT and/or SBRT procedures:

- i. Full capacity of a Linear Accelerator MRT Unit is 8,736 procedures, developed from the following formula: 3.5 treatments per hour, times 48 hours (6 days of operation, 8 hours per day, or 5 days of operation, 9.6 hours per day), times 52 weeks.
- ii. Linear Accelerator Minimum Capacity: 6,000 procedures per Linear Accelerator MRT Unit annually, except as otherwise noted herein.
- iii. Linear Accelerator Optimal Capacity: 7,688 procedures per Linear Accelerator MRT Unit annually, based on a 12% average downtime per MRT unit during normal business hours annually.
- iv. An applicant proposing a new Linear Accelerator should project a minimum of at least 6000 MRT procedures in the first year of service in its Service Area, building to a minimum of 7,688 procedures per year by the third year of service and for every year thereafter.

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The applicant projects the following MRT procedures: 7,111 procedures in Year One; 7,715 procedures in Year Two; and 8,336 in Year Three.

It appears that the application meets this criterion.

b. For Linear Accelerators dedicated to performing only SRT procedures, full capacity is 500 annual procedures.

This criterion is not applicable.

c. For Linear Accelerators dedicated to performing only SRT/SBRT procedures, full capacity is 850 annual procedures.

This criterion is not applicable.

d. An exception to the standard number of procedures may occur as new or improved technology and equipment or new diagnostic applications for Linear Accelerators develop. An applicant must demonstrate that the proposed Linear Accelerator offers a unique and necessary technology for the provision of health care services in the proposed Service Area.

This criterion is not applicable.

e. Proton Beam MRT Units. As of the date of the approval and adoption of these Standards and Criteria, insufficient data are available to enable detailed utilization standards to be developed for Proton Beam MRT Units.

This criterion is not applicable.

2. Need Standards for MRT Units.

- a. For Linear Accelerators not dedicated solely to performing SRT and/or SBRT procedures, need for a new Linear Accelerator in a proposed Service Area shall be demonstrated if the average annual number of Linear Accelerator procedures performed by existing Linear Accelerators in the proposed Service Area exceeds 6,000.**

The average annual number of linear accelerator procedures in the total service area averaged 5,527 procedures in 2012. There were six (6) providers providing 60,082 procedures with eleven (11) linear accelerators. St. Jude's Children's Research Hospital provided 1,437 treatments on two (2) linear accelerators in 2012. St. Jude's serves a unique pediatric population. When excluding St. Jude's from the count the result is 59,365 procedures, nine linear accelerators and an average of 6,596 procedures per unit. The applicant reports that Baptist Memorial Hospital-DeSoto in DeSoto County, Mississippi has a linear accelerator which performed 10,152 procedures in 2012. When excluding Baptist DeSoto the result is 49,213 procedure, eight linear accelerators, and an average of 6,152 procedures per unit.

When considering all linear accelerators in the service area, it appears that the application does not meet this criterion.

- b. For Linear Accelerators dedicated to performing only SRT procedures, need in a proposed Service Area shall be demonstrated if the average annual number of MRT procedures performed by existing Linear Accelerators dedicated to performing only SRT procedures in a proposed Service Area exceeds 300, based on a full capacity of 500 annual procedures.**

This criterion is not applicable.

- c. For Linear Accelerators dedicated to performing only SRT/SBRT procedures, need in a proposed Service Area shall be demonstrated if the average annual number of MRT procedures performed by existing Linear Accelerators dedicated to performing only SRT/SBRT procedures in a proposed Service Area exceeds 510, based on a full capacity of 850 annual procedures.**

This criterion is not applicable.

- d. Need for a new Proton Beam MRT Unit: Due to the high cost and extensive service areas that are anticipated to be required for these MRT Units, an applicant proposing a new Proton Beam**

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MRT Unit shall provide information regarding the utilization and service areas of existing or planned Proton Beam MRT Units' utilization and service areas (including those that have received a CON), if they provide MRT services in the proposed Service Area and if that data are available, and the impact its application, if granted, would have on those other Proton Beam MRT Units.

This criterion is not applicable.

- e. An exception to the need standards may occur as new or improved technology and equipment or new diagnostic applications for MRT Units develop. An applicant must demonstrate that the proposed MRT Unit offers a unique and necessary technology for the provision of health care services in the proposed Service Area.

This criterion is not applicable.

3. Access to MRT Units.

- a. An MRT unit should be located at a site that allows reasonable access for residents of the proposed Service Area.

In 2012 92% of patients seeking Methodist linear accelerator services originated from the proposed service area.

It appears that the application meets this criterion.

- b. An applicant for any proposed new Linear Accelerator should document that the proposed location of the Linear Accelerator is within a 45 minute drive time of the majority of the proposed Service Area's population.

All of Shelby County and the majority of the remaining service area are within a 45 minute drive to the proposed linear accelerator location.

It appears that the application meets this criterion.

- c. Applications that include non-Tennessee counties in their proposed Service Areas should provide evidence of the

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number of existing MRT units that service the non-Tennessee counties and the impact on MRT unit utilization in the non-Tennessee counties, including the specific location of those units located in the non-Tennessee counties, their utilization rates, and their capacity (if that data are available).

The applicant reports the only linear accelerator in non-Tennessee counties is located at Baptist Memorial Hospital in Desoto County, Mississippi. The linear accelerator provided 7,152 procedures in 2010 increasing 40.5% to 10,152 procedures in 2012. The linear accelerator operated at 169% of the minimum threshold of 6,000 per unit in 2012.

It appears that the application meets this criterion.

4. **Economic Efficiencies.** All applicants for any proposed new MRT Unit should document that lower cost technology applications have been investigated and found less advantageous in terms of accessibility, availability, continuity, cost, and quality of care.

The applicant documents lower cost technology was investigated, but none were found to deliver the accuracy and reliability of the selected linear accelerator

It appears that the application meets this criterion.

5. **Separate Inventories for Linear Accelerators and for other MRT Units.** A separate inventory shall be maintained by the HSDA for Linear Accelerators, for Proton Beam Therapy MRT Units, and, if data are available, for Linear Accelerators dedicated to SRT and/or SBRT procedures and other types of MRT Units.

The HSDA complies with the above criterion.

6. **Patient Safety and Quality of Care.** The applicant shall provide evidence that any proposed MRT Unit is safe and effective for its proposed use.

- a. The United States Food and Drug Administration (FDA)

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must certify the proposed MRT Unit for clinical use.

The applicant provides FDA certification for the proposed MRT unit.

It appears that the application meets this criterion.

- b. The applicant should demonstrate that the proposed MRT Units shall be housed in a physical environment that conforms to applicable federal standards, manufacturer's specifications, and licensing agencies' requirements.**

The applicant provided an architect's letter that confirms this proposed project conforms to the above standards, specifications, and requirements.

It appears that the application meets this criterion.

- c. The applicant should demonstrate how emergencies within the MRT Unit facility will be managed in conformity with accepted medical practice. Tennessee Open Meetings Act and/or Tennessee Open Records Act.**

The applicant has provided a detailed plan on how facility emergencies will be managed.

It appears that the application meets this criterion.

- d. The applicant should establish protocols that assure that all MRT Procedures performed are medically necessary and will not unnecessarily duplicate other services.**

The applicant has established protocols addressing the above criterion. The applicant provided their system policy in Attachment C: LINAC Services (6) (d).

It appears that the application meets this criterion.

- e. An applicant proposing to acquire any MRT Unit shall demonstrate that it meets the staffing and quality assurance**

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requirements of the American Society of Therapeutic Radiation and Oncology (ASTRO), the American College of Radiology (ACR), the American College of Radiation Oncology (ACRO) or a similar accrediting authority such as the National Cancer Institute (CNI). Additionally, all applicants shall commit to obtain accreditation from ASTRO, ACR or a comparable accreditation authority for MRT Services within two years following initiation of the operation of the proposed MRT Unit.

Methodist has demonstrated staffing and quality assurance requirements have been met. Accreditation by the American College of Radiology (ACR) will be obtained within the first two years of operation.

It appears that the application meets this criterion.

- f. All applicants should seek and document emergency transfer agreements with local area hospitals, as appropriate. An applicant's arrangements with its physician medical director must specify that said physician be an active member of the subject transfer agreement hospital medical staff.

Emergencies will be transferred to Methodist Germantown Hospital. The Medical Director of the proposed project is an active member of the Methodist Germantown Hospital.

It appears that the application meets this criterion.

- g. All applicants should provide evidence of any onsite simulation and treatment planning services to support the volumes they project and any impact such services may have on volumes and treatment times.

The CT simulator from the Methodist Radiation Oncology Center will be relocated to this proposed center to support both linear accelerators. The applicant indicates the CT simulator will support projected volumes.

It appears that the application meets this criterion.

7. **The applicant should provide assurances that it will submit data in a timely fashion as requested by the HSDA to maintain the HSDA Equipment Registry.**

The applicant assures HSDA data submission requirements will be met.

It appears that the application meets this criterion.

8. **In light of Rule 0720-11.01, which lists the factors concerning need on which an application may be evaluated, and Principle No. 2 in the State Health Plan, "Every citizen should have reasonable access to health care," the HSDA may decide to give special consideration to an applicant:**

- a. **Who is offering the service in a medically underserved area as designated by the United States Health Resources and Services Administration;**

The hospital is not located in a designated MUA but there are designated areas within the applicant's service area that are deemed underserved. In Shelby County, 59 census tracts are deemed underserved. In the remaining service area counties, Fayette and Tipton Counties in Tennessee; DeSoto and Marshall Counties in Mississippi; and Crittenden County in Arkansas are underserved.

It appears that the application meets this criterion.

- b. **Who is a "safety net hospital" or a "children's hospital" as defined by the Bureau of TennCare Essential Access Hospital payment program; or**

This criterion is not applicable.

- c. **Who provides a written commitment of intention to contract with at least one TennCare MCO and, if providing adult services, to participate in the Medicare program.**

The applicant is Medicare and Medicaid certified and has contracts with BlueCross Blue Shield, TennCare Select and United Healthcare.

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It appears that the application meets this criterion.

Staff Summary

The following information is a summary of the original application and all supplemental responses. Any staff comments or notes, if applicable, will be in bold italics.

This project proposes to establish an integrated comprehensive cancer center by renovating and expanding an existing freestanding three story building that currently houses the Methodist Breast Center, and relocating and updating major medical equipment. The facility will house multiple sites of care owned and operated by Methodist and the West Clinic. The proposed facility will be open from 7:00 am-8:00 pm Monday-Friday with additional Saturday hours.

In 2011, Methodist, the West Clinic, and the University of Tennessee Health Science Center (UTHSC) entered into an affiliation agreement to provide cancer care. The proposed West Cancer Center will house both hospital-based services operated by Methodist, as well as physician, clinical research and administrative offices owned by the West Clinic and the University of Tennessee Health Science Center (UTHSC). The West Clinic currently has over thirty (30) physicians in multidisciplinary specialties and multiple locations in Tennessee, Mississippi, and Arkansas.

The proposed project will consolidate the following four (4) freestanding sites-owned and operated by Methodist and the West Clinic which are located within a 4-mile radius of the project site:

- **The Methodist Breast Center** on Wolf River Boulevard (the site for this project) provides comprehensive breast care with digital screening and diagnostic mammography, stereotactic suites for biopsies and bone density testing.
- **The Methodist Radiation Oncology Center** (less than a mile away from the project site on Germantown Parkway) houses a linear accelerator and CT simulator and provides radiation therapy services. The vacated space will be evaluated for future expansion of Methodist ambulatory services.
- **The West Clinic on Humphreys Boulevard** houses physician clinics, chemotherapy, IV infusion therapy, radiology (including MRI, CT, PET/CT, ultrasound and x-ray), interventional radiology, pharmacy, lab services, pain and palliative care and genetic, nutritional and psychological counseling services. This location is the proposed site for Le

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Bonheur Children's Hospital's pending CON application (CN1311-042) for a pediatric outpatient center.

- **The West Clinic's Comprehensive Breast Center** (across the street from the project site on Wolf River Boulevard) houses three breast surgeons and provides complete breast care. This site is leased and the lease expires within six months of relocating the services.

The following table is a summary of medical equipment involved with this project:

Summary of Methodist Hospital Major Equipment

	The West Clinic on Humphreys	Methodist Radiation Oncology Center	New to Market
Linear Accelerator		Existing to be relocated	New
CT Simulator		Existing to be relocated	
CT (2 units)	Existing to be relocated		
MRI 1.5T	Existing to be replaced and relocated		
PET/CT	Existing to be relocated		
Distance from new location	3.8 miles	0.4 miles	

Source: CN1310-043 Table 2

- West Clinic on Humphreys -An existing 1.5T MRI will be replaced and relocated, and a PET/CT and two (2) CT units will be relocated
- A linear accelerator (LINAC) and CT Simulator will be relocated from the Methodist Radiation and Oncology Center (Germantown)
- LINAC services will be available between 7:00 am and 7:00 pm Monday-Friday
- The applicant will surrender current CONs for medical equipment to be relocated from The West Clinic on Humphreys and the Methodist Radiation Oncology Center

This project also involves the addition of the following major medical equipment:

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- A new linear accelerator with a useful life of 7 years will be added to the market in the proposed service area at a total cost of \$2,956,102.

An overview of the project is provided on pages 8A-9 of the original application.

The applicant expects to begin operation of the proposed project in August 2015.

Need

- The applicant indicates an efficient and cohesive cancer care system is needed for the expected increase in cancer cases of an expanded elderly population
- There is a need for outreach, screening and education in the African-American communities in the service area to eliminate health disparities and reduce the number of cancer deaths
- Methodist indicates an additional linear accelerator is needed based on current and projected demand.
- The correct cancer related services and equipment is needed to be successful in managing costs and creating risk-based models for the service areas rising cancer incidence and mortality rates.

Ownership

Methodist Healthcare-Memphis Hospitals (Methodist) is a not-for-profit corporation that operates five Shelby County hospitals under a single license. The applicant is a wholly-owned subsidiary of a parent organization, Methodist Healthcare, which is a not-for-profit corporation with ownership and operating interests in healthcare facilities in West Tennessee and North Mississippi.

Facility Information

The proposed project involves the renovation and expansion of the entire building. The expansion will provide for the addition of an 8,000 SF radiation oncology center on the southeast corner of the building. Open atrium and waiting areas will be located throughout the core of the building. Physician offices and hospital-based services will be co-mingled to improve collaboration and patient flow. A floor plan drawing is included as Attachment B.IV.

Methodist will renovate 101,235 SF of the existing space and construct 10,250 SF of new space. The following describes the services that will be provided on each floor of the facility:

- The first floor will house administrative offices for Associates from the West Clinic. The Breast Center, radiology, radiation therapy and phlebotomy hospital-based services will utilize the remainder of this floor.

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Lead shielded linear accelerator vaults and MRI/CT rooms will be added to first floor new space.

- The second floor will house the surgery clinics, sterile processing and physician clinics.
- The third floor will house the remainder of the administrative and clinical research space operated by the West Clinic and the UTHSC as well as pharmacy space operated by the clinics. The hospital-spaced located on this floor includes the lab, additional phlebotomy space and the infusion - or chemotherapy infusion - chairs and beds.
- A letter dated November 11, 2013 from Jon R, Summer, AIA, of the Architectural Firm brg3s, states the construction project will be designed within all applicable federal and state standards, regulations, and guidelines.

Service Area Demographics

West Cancer Center's declared service area includes Shelby, Fayette, and Tipton Counties in Tennessee, as well as Desoto and Marshall Counties in Mississippi and Crittenden County in Arkansas.

- The total population of the Tennessee service area is estimated at 1,048,607 residents in calendar year (CY) 2014 increasing by approximately 1.7% to 1,066,445 in CY 2018.
- The range of growth is 1.1% in Shelby County to 9.7% in Fayette County.
- The overall statewide population is projected to grow by 3.7% from 2014 to 2018.
- The Age 65+ population of the Tennessee service area is estimated at 123,607 residents in calendar year (CY) 2014 increasing by approximately 15.2% to 142,438 in CY 2018. The Age 65+ population statewide is expected to grow 12.3% during this time period.
- The Age 65+ population of the Tennessee service area is estimated to be 13.4% of the total population in 2018. This compares to 16.1% for the state overall.
- The latest 2013 percentage of the proposed service area population enrolled in the TennCare program is approximately 19%. The overall TennCare percentage for Shelby County 24%. The statewide enrollment proportion is 18.3%.

Source: The University of Tennessee Center for Business and Economic Research Population Projection Data Files, Reassembled by the Tennessee Department of Health, Division of Policy, Planning and Assessment, Office of Health Statistics.

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Service Area Linear Accelerator Utilization

The applicant is proposing to add one linear accelerator to the service area. The table below reviews historical utilization in the service area by facility.

Primary Service Area Linear Accelerator Utilization, 2010-2012

County	Provider Type	Provider	2010		2011		2012		2012 *Utilization on Standard %	% Change 10'-12'
			# Units	Proc.	# Units	Proc.	# Units	Proc.		
Shelby	HOSP	Baptist Memorial Hospital - Memphis	3	10,989	3	11,343	2	11,052	92%	+.6
Shelby	ASTC	Baptist Memorial Hospital Tipton	1	7,365	1	5,270	1	7,610	126%	+3.3%
Shelby	HOSP	Methodist Healthcare-University Hospital	3	21,287	3	21,049	3	23,756	132%	+11.6%
Shelby	HOSP	Regional Medical Center at Memphis (The Med)	1	87	0	0	0	0	n/a	
Shelby	HOSP	St. Francis Hospital	2	7,508	2	7,576	2	6,795	56.6%	-9.5%
Shelby	HOSP	St. Jude's Children's	2	5,789	2	4,800	2	1,437	12.0%	-75.2%
DeSoto, MS	HOSP	Baptist Memorial Hospital-DeSoto	1	7,152	1	7,187	1	10,152	169.2%	+41.9%
		Total of Providers	13	60,177	12	57,225	11	60,802		+1.0%
		Utilization per linear unit	4,629		4,769		5,527		92.1%	+19.4%
		Exclude St. Jude's	11	54,388	10	52,425	9	59,365		+9.2%
		Utilization per linear unit	4,944		5,243		6,596		109.9%	+33.4%
		Exclude Baptist DeSoto and St. Jude	10	47,236	9	45,238	8	49,213		+4.2%
		Utilization per linear unit	4,724		5,026		6,152		102.5%	+30.2%

Source: Medical Equipment Registry-2/11/2014

*The need for a new Linear Accelerator in a proposed Service Area shall be demonstrated if the average annual number of Linear Accelerator procedures performed by existing Linear Accelerators in the proposed Service Area exceeds 6,000.

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- The chart above indicates that there are eleven linear accelerators operating in the service area in 2012.
- The existing LINAC utilization combined increased 1.0%, from 60,177 in 2010 to 60,802 in 2012.
- Methodist Healthcare-University Hospital linear accelerators' utilization experienced the highest percentage increase of 11.6% from 2010 to 2012.
- The existing LINAC units were operating at 92.1% capacity in 2012 (5,527 procedures) of the State Health Plan's minimum utilization standard of 6,000 treatments annually for existing linear accelerators. When excluding St. Jude's because of its special pediatric population and worldwide patient base, the remaining units operated at 109.9% of capacity. When excluding Baptist DeSoto and St. Jude, the remaining units operated at 102.5% of capacity.
- It should be noted that the Regional Medical Center of Memphis (The Med) ceased operating its one (1) linear accelerator in February 2010.
- Baptist Memorial Hospital-Memphis' number of LINAC units decreased from three (3) to two (2) from 2011 to 2012.
- In the supplemental response, the applicant confirmed with the Mississippi Division of Health that one additional linear accelerator for Baptist Memorial Hospital-DeSoto was approved on August 29, 2013 which is not included in the above table.

Service Area MRI and PET Utilization

The applicant is relocating MRI and PET services to the proposed project and does not include the addition of units. The following table provide the overall service area trends in PET and MRI utilization.

Medical Equipment Type	2010		2011		2012		2012 Utilization on Standard %	% Change 10'-12'
	# Units	Procedures	# Units	Procedures	# Units	Procedures		
MRI	38*	111,373	40*	115,058	41*	109,992	**95.2%	-1.2%
PET Scanners	6	5,410	6	6,222	6	5,755	60%	+6.4%

Source: Medical Equipment Registry-2/11/14

*Total includes 1 mobile unit.

**Utilization does not include one mobile unit owned by Methodist Healthcare-Fayette Hospital (Fayette County) which operated one day per week and provided 271 procedures

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MRI

- In 2012 there were forty (40) stationary MRI units and One (1) mobile part-time MRI unit operating one day per week
- The stationary units operated at 2,743 procedures per MRI unit, or 95.2% of the optimal efficiency for a stationary MRI unit of 2,880 procedures per year as indicated in the State Health Plan MRI Certificate of Need Standards and Criteria.

PET

- There were 6 PET scanners in the proposed service area in 2012
- The six (6) PET scanners average 959 procedures per year in 2012, or 60% of the optimal efficiency for a stationary PET unit of 1,600 procedures per year as indicated in the State Health Plan PET Certificate of Need Standards and Criteria.

Applicant's Historical and Projected Linear Accelerator Utilization**Applicant's Overall Utilization**

	2010		2011		2012		% Change 10'-12'	2016 Year 1		2017 Year Two	
Provider	# <i>Units</i>	<i>Proc.</i>	# <i>Units</i>	<i>Proc.</i>	# <i>Units</i>	<i>Proc.</i>		# <i>Unit s</i>	<i>Proc.</i>	# <i>Units</i>	<i>Proc.</i>
*Methodist Healthcare- University Hospital	3	21,287	3	21,049	3	23,756	+11.6%	4	26,822	4	28,165

- Linear accelerator utilization increased from 21,287 procedures in 2010 to 23,756 procedures in 2012, an increase of 11.6%.
- The applicant expects the utilization to increase 32.3% from 21,287 procedures in 2010 to 28,165 procedures 2017.

Applicant's Projected Utilization by Site of Service

Location	2016 Year 1		2017 Year Two		Utilization Standard %	% Increase
	<i># Units</i>	<i>Proc.</i>	<i># Units</i>	<i>Proc.</i>		
Methodist Healthcare- University Hospital	2	12,601	2	12,735	106%	+1.1%
West Cancer Center	2	14,221	2	15,430	128%	+8.5%
Total	4	26,822	4	28,165	117%	+5.0%

- West Cancer Center is projected to experience the highest percentage increase in linear accelerator utilization from 14,221 procedures in Year One, to 15,430 procedures in Year Two, an increase of 8.5%.
- West Cancer Center is projected to operate at 128% capacity in Year Two of the State Health Plan's minimum utilization standard of 6,000 treatments annually per linear accelerator, while overall the percentage is projected to be 117%.

Project Cost

Major costs are:

- The largest cost of the proposed project is the acquisition of site at \$22,500,000 or 37.2% of total project cost.
- The next largest cost is \$16,152,175 for construction costs or 26.7% of total project cost.
- Another major cost is \$13,515,708 for moveable equipment or 22.3% of total cost.
- For other details on Project Cost, see the Project Cost Chart on page 42A of the original application.
- The applicant expects the construction cost per square foot to be \$145.00. This falls below the 1st quartile for hospital construction of \$234.64/sq. for projects previously approved between 2010 and 2012.

Historical Data Chart

- According to the Historical Data Chart, Memphis Healthcare-Memphis Hospitals reported net operating income less capital expenditures in each of the three past years: \$96,837,000 for 2010; \$84,637,000 for 2011; and \$88,224,000 for 2012.

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Projected Data Chart

West Cancer Project

The Projected Data Chart for the overall West Cancer Project reflects \$463,774,175 in total gross revenue on 132,888 patient visits during the first year of operation and \$471,893,183 on 136,471 patient visits in Year Two. The Projected Data Chart reflects the following:

- Net operating income less capital expenditures for the applicant will equal \$5,584,130 in Year One decreasing to \$5,294,700 in Year Two.
- Net operating revenue after bad debt, charity care, and contractual adjustments is expected to reach \$117,953,152 in Year One and \$120,003,002 in Year Two representing approximately 25% of total gross revenue in both years.
- Gross operating margin is expected to be 1.2% in Year 1 and 1.1% Year 2.

West Cancer Center Linear Accelerator

The Projected Data Chart for the linear accelerators reflects \$55,273,417 in total gross revenue on 14,221 procedures during the first year of operation and \$56,243,445 on 15,430 in Year Two.

The Projected Data Chart reflects the following:

- Net operating income less capital expenditures for the applicant will equal \$7,590,592 in Year One increasing to \$7,721,292 in Year Two.
- Net operating revenue after bad debt, charity care, and contractual adjustments is expected to reach \$13,820,371 in Year One and \$14,062,898 in Year Two, with both years representing approximately 25% of total gross revenue.
- Gross operating margin is expected to be 13.7% in Year One and Year Two.

Charges

In Year One of the proposed project, the average linear accelerator charge per procedure information is as follows:

- The proposed average gross charge per linear accelerator procedure is \$3,887; however the net charge per procedure is \$972.
- The service area hospital-based 2012 linear accelerator gross charges ranges from \$3,398 per procedures at St. Francis Hospital to \$7,919 at Methodist Healthcare-University Hospital.

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Medicare/TennCare Payor Mix

- The expected payor mix for the West Cancer Center project in Year 1 includes 44% for Medicare and 12% for TennCare/Medicaid.
- Methodist Healthcare contracts with all TennCare MCOs in the service area: United Healthcare (AmeriChoice), BlueCare, and TennCare Select.

Financing

A November 7, 2013 letter from Chris McLean, Methodist LeBonheur Healthcare's Senior Vice President of Finance, confirms the applicant has sufficient cash reserves to finance the proposed project.

Methodist LeBonheur Healthcare and Affiliates audited financial statements for the period ending December 31, 2012 reported \$71,677,000 in cash and cash equivalents, total current assets of \$1,058,442,000, total current liabilities of \$182,973,000 and a current ratio of 5.78:1.

Current ratio is a measure of liquidity and is the ratio of current assets to current liabilities which measures the ability of an entity to cover its current liabilities with its existing current assets. A ratio of 1:1 would be required to have the minimum amount of assets needed to cover current liabilities.

Staffing**Radiation Therapy**

The proposed staffing for West Cancer Center is displayed in the table below:

Position Type	FTEs
LPN	4.0
RN	58.5
Nurse Practitioner	9.0
Medical Lab Tech	2.6
Medical Tech	5.8
Clinical Coordinator	8.0
Clinical Manager	8.0
Health Services Manager	8.0
Lab Assistant	3.0
Phlebotomist	8.0
Physicist/Chief	4.0
Dosimetrist	4.0
Radiology Tech	30.3
Simulation Therapist	7.0
Surgical Tech	3.0
Psychologist	1.0
Registered Dietician	0.8
Total Clinical	165
Other non-clinical	122.9
Total	287.9

Please refer to Table 14 in the supplemental response for a complete listing of West Cancer center's anticipated staffing pattern.

Licensure/Accreditation

Methodist is licensed by the Tennessee Department of Health, Division of Health Care Facilities. Methodist is accredited by The Joint Commission up to thirty-six (36) months beginning April 20, 2013 for twenty (20) facilities in the Memphis area. The Joint Commission conducted an unannounced full survey from April 15, 2013 through April 19, 2013. A letter dated June 11, 2013 from The Joint Commission recommends continued Medicare certification effective April 20, 2013.

The applicant has submitted the required information on corporate documentation, title and deeds, service area population demographics and credentials of the radiation oncology medical staff. Staff will have a copy of these documents available for member reference at the meeting. Copies are also available for review at the Health Services and Development Agency office.

According to the Project Completion Forecast Chart, the applicant plans to have the West Cancer Center operating by August 2015. Should the Agency vote to approve this project, the CON would expire in three years.

CERTIFICATE OF NEED INFORMATION FOR THE APPLICANT:

There are no other Letters of Intent, or denied applications for this applicant.

Pending Applications

Methodist Healthcare-dba Le Bonheur Children's Hospital, CN1311-042, has a pending application to be heard at the February 26, 2014 Agency meeting for the establishment of a pediatric center and to initiate and acquire magnetic resonance imaging (MRI) and computed tomography (CT) service and equipment. The facility will be located at 100 North Humphreys Boulevard, Memphis (Shelby County), TN and will be operated as an outpatient department of LeBonheur Children's Hospital. The estimated project cost is \$26,798,857.

Outstanding Certificates of Need

Methodist Healthcare-Memphis Hospitals d/b/a Methodist University Hospital, CN1111-047A, has an outstanding Certificate of Need that will expire on April 1, 2015. It was approved at the February 22, 2012 Agency meeting for the relocation and replacement of a PET/CT unit from 1388 Madison to the West Clinic at 1588 Union Ave., Memphis. The unit will continue to be operated by Methodist and will not increase the number of PET units in the service area. The estimated cost of the project is \$3,257,783.00. *Project Status-An email dated February 10, 2014 from the project contact stated the PET equipment was installed in October 2013 and final renovations have been completed. A final report is pending.*

Methodist Healthcare-Memphis Hospitals d/b/a Methodist University Hospital, CN1208-041A, has an outstanding Certificate of Need that will expire on January 1, 2016. The Certificate of Need was approved at the November 14, 2012 Agency meeting for the replacement and relocation of the ED within the hospital's campus through 93,000 SF of new construction and renovation of 6,200 SF of existing space. The existing CT will be replaced. The estimated project cost is \$33,488,985.00. **Project Status:** *An email dated February 10, 2014 from the project contact stated the ED project is progressing within budget and on time. The structure was topped out in January and construction is scheduled to be completed in late summer 2014. Initiation of services is expected on or before October 2014.*

West Clinic has financial interests in this project. West Clinic has no Letters of Intent, pending or outstanding applications

WEST CANCER CENTER

CN1311-043

February 26, 2014

PAGE 22

Denied Applications

West Clinic, CN1102-006D, had an application denied at the May 25, 2011 Agency meeting. The application was for the establishment of a single specialty ambulatory surgical treatment center (ASTC) limited to radiation therapy for use by only the physicians and patients of the West Clinic, initiate radiation therapy services and acquire a linear accelerator at 100 North Humphreys Blvd., Memphis, Tennessee. The estimated project cost was **\$8,375,057**. *Reason for Denial: The applicant did not establish the need for the additional linear accelerator; thus, the project did not contribute to the orderly development of healthcare.*

CERTIFICATE OF NEED INFORMATION FOR OTHER SERVICE AREA FACILITIES:

There are no other Letters of Intent, denied or pending applications for other entities proposing this type of service.

Outstanding Certificates of Need

Baptist Memorial Hospital-Tipton d/b/a Baptist Center for Cancer Care, CN1211-057A, has an outstanding Certificate of Need that will expire on April 1, 2016. The Certificate of Need was approved at the February 27, 2013 Agency meeting for the relocation of Baptist Center for Cancer Care from its CON approved site of 1238 and 1280 South Germantown Parkway, Germantown (Shelby County), TN to the building known as The Shops of Humphreys Center at 50 Humphreys Boulevard, Memphis (Shelby County), TN. The project involves the relocation of a positron emission tomography unit (PET/CT), two (2) linear accelerators, along with a Cyberknife linear accelerator. One of the existing linear accelerators to be relocated from Baptist Memorial Hospital-Memphis (BMH-M) will be replaced when installed at Baptist Center for Cancer Care. The estimated project cost is **\$84,834,200.00**. **Project Status:** *A January 27, 2014 update indicated the design development phase is nearing completion, a construction manager has been selected and will begin pre-construction design and budget verification, and it is anticipated the construction document phase will begin in the near future. The renovation of the Thoracic Clinic to be constructed in the 6029 Physicians Office Building has been designed, has received approval, with construction scheduled to begin in February 2014.*

PLEASE REFER TO THE REPORT BY THE DEPARTMENT OF HEALTH, DIVISION OF HEALTH STATISTICS, FOR A DETAILED ANALYSIS OF THE STATUTORY CRITERIA OF NEED, ECONOMIC FEASIBILITY, AND CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTH CARE IN THE AREA FOR THIS PROJECT. THAT REPORT IS ATTACHED TO THIS SUMMARY IMMEDIATELY FOLLOWING THE COLOR DIVIDER PAGE.

PME
(2/14/14)

LETTER OF INTENT



SECRET

LETTER OF INTENT TENNESSEE HEALTH SERVICES AND DEVELOPMENT AGENCY

The Publication of Intent is to be published in the Commercial Appeal which is a newspaper of general circulation in Shelby County, Tennessee, on or before November 10, 2013 for one day.

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This is to provide official notice to the Health Services and Development Agency and all interested parties, in accordance with T.C.A. § 68-11-1601 *et seq.*, and the Rules of the Health Services and Development Agency, that Methodist Healthcare-Memphis Hospitals (a general hospital), owned and managed by Methodist Healthcare-Memphis Hospitals (a not for profit corporation), intends to file an application for a Certificate of Need to establish a comprehensive cancer center, to relocate linear accelerator, positron emission tomography/computed tomography (PET/CT), magnetic resonance imaging (MRI) and computed tomography (CT) services and equipment, to replace the MRI equipment, to acquire an additional linear accelerator and to establish ambulatory operating rooms. The facility will be located at 7945 Wolf River Boulevard, Germantown, TN 38138 and will be operated as an outpatient department of Methodist Healthcare – Memphis Hospitals under the name WEST CANCER CENTER. The project includes a full array of cancer services and programs. The project involves approximately 8,050 square feet of new space and 101,235 of renovated space. This project does not involve inpatient beds or other services for which a certificate of need is required. The estimated project costs are \$60,554,193.

The anticipated date of filing the application is on or before November 13, 2013. The contact person for this project is Carol Weidenhoffer, Corporate Director of Planning, Research and Business Development, who may be reached at: Methodist Healthcare, 1407 Union Avenue, Suite 300, Memphis, TN, 38104, 901-516-0679.

Carol Weidenhoffer
(Signature)

11/7/2013
(Date)

Carol.Weidenhoffer@mlh.org
(E-mail Address)

=====

The Letter of Intent must be filed in triplicate and received between the first and the tenth day of the month. If the last day for filing is a Saturday, Sunday or State Holiday, filing must occur on the preceding business day. File this form at the following address:

Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

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The published Letter of Intent must contain the following statement pursuant to T.C.A. § 68-11-1607(c)(1). (A) Any health care institution wishing to oppose a Certificate of Need application must file a written notice with the Health Services and Development Agency no later than fifteen (15) days before the regularly scheduled Health Services and Development Agency meeting at which the application is originally scheduled; and (B) Any other person wishing to oppose the application must file written objection with the Health Services and Development Agency at or prior to the consideration of the application by the Agency.

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ORIGINAL APPLICATION

NOV 13 '13 AM 11:2

METHODIST HEALTHCARE – MEMPHIS HOSPITALS

**CERTIFICATE OF NEED APPLICATION
TO ESTABLISH
THE WEST CANCER CENTER –
AN INTEGRATED COMPREHENSIVE
CANCER CENTER**

MEMPHIS, SHELBY COUNTY

Filed November 2013

November 25, 2013

11:00am

1. Name of Facility, Agency, or Institution

Methodist Healthcare–Memphis Hospitals dba West Cancer Center

Name

7945 Wolf River Boulevard

Shelby
CountyGermantown
CityTN
State38138
Zip Code**2. Contact Person Available for Responses to Questions**Carol Weidenhoffer
NameCorporate Director of Planning,
Research and Business
Development
TitleMethodist Le Bonheur Healthcare
Company NameCarol.Weidenhoffer@mlh.org
E-mail address1407 Union Avenue, Suite 300
Street or RouteMemphis
CityTN
State38104
Zip CodeEmployee
Association with Owner901-516-0679
Phone Number901-516-0621
Fax Number**3. Owner of the Facility, Agency or Institution See Attachment A:3**Methodist Healthcare–Memphis Hospitals
Name901-516-0546
Phone Number1211 Union Avenue, Suite 700
Street or RouteShelby
CountyMemphis
CityTN
State38104
Zip Code**4. Type of Ownership of Control (Check One) See Attachment A:4**

A. Sole Proprietorship

F. Governmental (State of TN
or Political Subdivision)

B. Partnership

G. Joint Venture

C. Limited Partnership

H. Limited Liability Company

D. Corporation (For Profit)

I. Other (Specify)

E. Corporation (Not-for-Profit)

X

PUT ALL ATTACHMENTS AT THE BACK OF THE APPLICATION IN ORDER AND REFERENCE
THE APPLICABLE ITEM NUMBER ON ALL ATTACHMENTS.

5. **Name of Management/Operating Entity (If Applicable)** ³⁰

Not Applicable

Name

Street or Route

County

City

State

Zip Code

PUT ALL ATTACHMENTS AT THE END OF THE APPLICATION IN ORDER AND REFERENCE THE APPLICABLE ITEM NUMBER ON ALL ATTACHMENTS.

6. **Legal Interest in the Site of the Institution (Check One)** See Attachment A:6

A. Ownership ☒ X

D. Option to Lease

B. Option to Purchase

E. Other (Specify)

C. Lease of _____ Years

PUT ALL ATTACHMENTS AT THE BACK OF THE APPLICATION IN ORDER AND REFERENCE THE APPLICABLE ITEM NUMBER ON ALL ATTACHMENTS.

7. **Type of Institution (Check as appropriate—more than one response may apply)**

A. Hospital Hospital Outpatient Department ☒ X

I. Nursing Home

B. Ambulatory Surgical Treatment Center (ASTC), Multi-Specialty

J. Outpatient Diagnostic Center

C. ASTC, Single Specialty

K. Recuperation Center

D. Home Health Agency

L. Rehabilitation Facility

E. Hospice

M. Residential Hospice

F. Mental Health Hospital

N. Non-Residential Methadone Facility

G. Mental Health Residential Treatment Facility

O. Birthing Center

H. Mental Retardation Institutional Habilitation Facility (ICF/MR)

P. Other Outpatient Facility

(Specify)

Q. Other Specify

8. **Purpose of Review (Check) as appropriate—more than one response may apply)**

A. New Institution

G. Change in Bed Complement

B. Replacement/Existing Facility

[Please note the type of change

C. Modification/Existing Facility ☒ X

by underlining the appropriate

D. Initiation of Health Care Service as defined in TCA § 68-11-1607(4)

response: Increase, Decrease,

Designation, Distribution,

Conversion, Relocation]

(Specify)

H. Change of Location

☒ X

E. Discontinuance of OB Services

I. Other (Specify)

F. Acquisition of Equipment MRI, LINAC ☒ X

9. **Bed Complement Data**

31

Please indicate current and proposed distribution and certification of facility beds.

	<u>Current Licensed</u>	<u>Beds *CON</u>	<u>Staffed Beds</u>	<u>Beds Proposed</u>	<u>TOTAL Beds at Completion</u>
A. Medical	1,015		763		1,015
B. Surgical					
C. Long-Term Care Hospital					
D. Obstetrical	69		69		69
E. ICU/CCU	204		204		204
F. Neonatal	90		90		90
G. Pediatric	171		171		171
H. Adult Psychiatric	34		34		34
I. Geriatric Psychiatric					
J. Child/Adolescent Psychiatric					
K. Rehabilitation					
L. Nursing Facility (non-Medicaid Certified)					
M. Nursing Facility Level 1 (Medicaid only)					
N. Nursing Facility Level 2 (Medicare only)					
O. Nursing Facility Level 2 (dually certified Medicaid/Medicare)					
P. ICF/MR					
Q. Adult Chemical Dependency					
R. Child and Adolescent Chemical Dependency					
S. Swing Beds					
T. Mental Health Residential Treatment					
U. Residential Hospice					
TOTAL	1,583		1,331		1,583

*CON-Beds approved but not yet in service

10.	Medicare Provider Number	44-0049
	Certification Type	Acute Care Facility
11.	Medicaid Provider Number	44-0049
	Certification Type	Acute Care Facility

12. **If this is a new facility, will certification be sought³² for Medicare and/or Medicaid?**

The applicant, Methodist Healthcare–Memphis Hospitals, is a healthcare provider that operates five Shelby County hospitals under a single license. The system is certified for both Medicare and TennCare/Medicaid; and the system's acute care provider numbers cover all five hospitals.

13. **Identify all TennCare Managed Care Organizations/Behavioral Health Organizations (MCO's/BHO's) operating in the proposed service area. Will this project involve the treatment of TennCare participants? If the response to this item is yes, please identify all MCO's/BHO's with which the applicant has contracted or plans to contract. Discuss any out-of-network relationships in place with MCO's/BHO's in the area.**

The Tennessee MCO's/BHO's operating in the project service area are United Healthcare offering Americhoice and Dual Complete (a Special Needs Plan) and Blue Cross Blue Shield offering Blue Care and TennCare Select. The project service area also includes DeSoto and Marshall counties in Mississippi and Crittenden County in Arkansas, where Medicaid is available.

All of Methodist Healthcare's hospitals treat TennCare participants under the system's TennCare contracts. Methodist Healthcare–Memphis Hospitals contracts with United Healthcare, Blue Cross Blue Shield and Medicaid providers in adjoining States.

NOTE: Section B is intended to give the applicant an opportunity to describe the project and to discuss the need that the applicant sees for the project. Section C addresses how the project relates to the Certificate of Need criteria of Need, Economic Feasibility, and the Contribution to the Orderly Development of Health Care. Discussions on how the application relates to the criteria should not take place in this section unless otherwise specified.

Please answer all questions on 8 1/2" x 11" white paper, clearly typed and spaced, identified correctly and in the correct sequence. In answering, please type the question and the response. All exhibits and tables must be attached to the end of the application in correct sequence identifying the questions(s) to which they refer. If a particular question does not apply to your project, indicate "Not Applicable (NA)" after that question.

I. Provide a brief executive summary of the project not to exceed two pages. Topics to be included in the executive summary are a brief description of proposed services and equipment, ownership structure, service area, need, existing resources, project cost, funding, financial feasibility and staffing.

Proposed Services and Equipment

- This project is for the establishment of an integrated comprehensive cancer center – The West Cancer Center. The mission is to enhance the care for cancer patients in the Mid-South by decreasing disparities, enhancing access and improving outcomes in a meaningful way.
- The proposed project will integrate and consolidate multiple sites of cancer care owned and operated by Methodist Healthcare-Memphis Hospitals (Methodist) and the West Clinic. The sites affected by this project are two Methodist ambulatory sites for cancer services – the Methodist Breast Center and the Radiation Oncology Center, the West Clinic's flagship cancer center on Humphreys which contains Methodist hospital-based services and the Comprehensive Breast Center operated by the West Clinic which will integrate with Methodist's hospital-based services.
- The center will house both hospital-based services operated by Methodist, as well as and physician, clinical research and administrative offices owned by the West Clinic and the University of Tennessee Health Science Center (UTHSC). Methodist, the West Clinic and the UTHSC entered into an affiliation agreement in 2011 to transform cancer care in the Mid-South. Together, the three organizations are advancing efforts to provide leading-edge treatment, extensive clinical trials and cutting-edge research in the fight against cancer.
- This project includes the relocation of existing hospital-based major moveable equipment operated by Methodist including two CT units, an MRI and a PET/CT from the West Clinic on Humphreys and a linear accelerator (LINAC) and CT simulator from the Methodist Radiation Oncology Center on Germantown Parkway. This is not additional equipment for the service area and is all located within a 4-mile radius of the project site – the equipment will continue to serve the same community. The project proposes to add a second LINAC based on need as outlined in the application.

Ownership Structure

- The applicant, Methodist Healthcare-Memphis Hospitals (Methodist), is a not-for-profit corporation that operates five Shelby County hospitals under a single license. The applicant is a wholly-owned subsidiary of a broader parent organization, Methodist Healthcare, which is a not-for-profit corporation with ownership and operating interests in health care facilities in West Tennessee, North Mississippi and East Arkansas.

Service Area

- The designated service area for the project is Shelby, Fayette and Tipton counties in Tennessee, DeSoto and Marshall counties in Mississippi and Crittenden County in Arkansas.

Need

- The most notable demographic changes in the service area over the last ten years have been the rapid population growth of suburban and exurban areas and the aging of the population. It is significant that the area population aged 65 years and older - the group that most needs health and cancer care - accounts for 85% of the total population growth. The number of people 65 and older will increase in the next ten years by more than 67,500 persons, or 45%.
- The aging of the population is significant for this project because cancer incidence and mortality rates increase exponentially with advancing age. Cancer incidence rates nationally for people over 65 are nine

times higher than rates for younger people; and cancer mortality rates are eighteen times higher. Communities within the service area already exceed state and national cancer incidence and mortality rates. Methodist must prepare an efficient and cohesive cancer care system for the increase in cancer cases.

- Additionally, there are significant racial disparities in cancer rates for Shelby County and the surrounding communities. Research shows that the black population tends to have higher occurrences of cancer as compared to whites, and blacks in the community die disproportionately from all cancers when compared to other races. In further analyses, it was determined that death rates from breast cancer and lung/bronchus cancer were the highest cancer mortality rates for Shelby County - again with prevalent racial disparity. Furthermore, in a recent study, Memphis was identified as the city with the largest disparity in breast cancer mortality rates between black and white women. There is a need for outreach, screening and education in the black communities to eliminate the disparities and reduce the number of deaths.
- Methodist demonstrates a growing need for an additional LINAC based on current and projected utilization. The hospital-based unit in Germantown performs more than 11,000 procedures annually as compared to 8,736 which is the State Health Plan's definition of full capacity – this is 130% of full capacity. Projected growth in cancer incidence alone will overburden Methodist's LINAC services. Planned regional outreach efforts could increase the average number of procedures well beyond manageable capacity. Methodist must add LINAC capacity to continue its mission.
- Cost controls are increasingly part of the quality conversation in health care. The systematic identification and elimination of waste while maintaining or improving quality is imperative for future success. The truly integrated care delivery model is the foundation for innovative reimbursement and value-based models such as episodes of care, bundled payments and even an oncology medical home. It is important to have the right cancer related services, including the additional LINAC, with the appropriate capacity to succeed in managing costs and creating risk-based models for the rising cancer incidence and mortality rates.

Existing Resources

- Local health care systems have made significant efforts to build partnerships and pursue collaborative systems of care in the past, yet a significant portion of cancer care delivery in the market is still fragmented. Chemotherapeutic infusion, radiation oncology, cancer specific surgery, interventional radiology and medical oncology services are still delivered in different locations with weak coordination and collaboration. Cancer providers must decrease the fractionization with integrated multidisciplinary clinics.
- The combined average utilization of the existing nine LINAC units in the service area is 6,596 in 2012 (excluding St. Jude Children's Hospital) which is well above the 6,000 threshold.

Project Cost, Funding, Feasibility

- The project cost of \$60,554,193 will be funded in cash by the applicant's parent, Methodist Healthcare. Methodist Healthcare is, and will remain, financially viable.

Staffing

- Staffing will not be increased with this project. Efficiencies gained from the new delivery models will support the redeployment of personnel in positions that are no longer needed into other aspects of the cancer delivery system.

Provide a detailed narrative of the project by addressing the following items as they relate to the proposal.

A. Describe the construction, modification and/or renovation of the facility (exclusive of major medical equipment covered by T.C.A. § 68-11-1601 et seq.) including square footage, major operational areas, room configuration, etc.

1. Overview of the Project

This project is for the establishment of an integrated comprehensive cancer center. The key attribute of such a center is the ability to cohesively coordinate and integrate all aspects of state-of-the-art cancer care. These aspects include clinical research, collaborative patient care, education, prevention dissemination and community outreach programs.

The new location is an existing, freestanding three-story building located on Wolf River Boulevard near the Germantown Parkway intersection in Germantown, Tennessee. The building currently houses the Methodist Germantown Breast Center. The building will be owned by Methodist Healthcare-Memphis Hospitals. The proposed project is an integrated comprehensive cancer center that will consolidate multiple freestanding ambulatory sites – all of which are located within a 4-mile radius of the project site. The center will be named the West Cancer Center and will house both hospital-based services operated by Methodist, as well as physician, clinical research and administrative offices owned by the West Clinic and the UTHSC.

Just to clarify the entities that will be housed in this building - Methodist, the West Clinic and the UTHSC entered into an affiliation agreement in 2011 to transform cancer care in the Mid-South. The West Clinic is the region's premier cancer practice and is a nationally-recognized leader in cancer research. The West Clinic currently has over 30 physicians in multidisciplinary specialties and multiple locations in Tennessee, Mississippi and Arkansas providing services to include medical oncology/hematology, gynecologic oncology, blood cell transplants, diagnostic and interventional radiology, metabolic bone disease/endocrinology, clinical psychology, pain and palliative care, radiation oncology, comprehensive breast center, nutritional counseling, ACORN research and the WINGS Cancer Foundation. As part of the affiliation, the UTHSC moved its Oncology Fellowship Program to the West Clinic and was provided funding to enhance cancer research, care programs and innovation. Together, the three organizations are advancing efforts to provide leading-edge treatment, extensive clinical trials and cutting-edge research in the fight against cancer.

This project covers the renovation and expansion of the entire building. The expansion will provide an increase of approximately 8,000 square feet for the addition of the radiation oncology center. The diagnostic and treatment services which require a Certificate of Need (CON) are all hospital-based. The other physician, clinical research and administrative offices do not require CON approval. Full renovation and expansion costs are included since costs were not easily segregated due to the shared common space - the open atrium and waiting areas are located throughout the core of the building. The co-mingling of physician offices and hospital-based services was intentional to ensure efficient and effective collaboration and seamless patient flow (See Attachment B:IV. for the floor plans).

Renovations and redesign will provide adequate space, improve patient work flows and improve collaboration with oncologists, radiologists, surgeons and patients. The project will not add any new services to Methodist's service lines. The objective is to maintain the applicant's current scope of services without disrupting continuity of care while meeting patient care needs more completely and efficiently. If granted CON approval, the services will be consolidated, integrated and scheduled to open at the new site in August 2015. The projections in this application use calendar years 2016 and 2017 as the project's first two full years of operation

2. Detailed Description of the Project

Methodist will renovate 101,235 SF of the existing space and construct 10,250 SF of new space. The newly constructed space is on the southeast corner of the building and will house portions of the radiology and radiation therapy departments. As noted on the plot plan (See Attachment B:III (A) for the Plot Plan), a

few existing parking spaces will be eliminated by this new construction. Yet, plans are under design for a parking deck to meet the needs of the building. The parking deck is not part of this project.

The building is designed with an open atrium and spacious waiting areas running through the core of the building. This space will remain intact on each floor with minor refurbishment and updates.

The first floor will house administrative offices for Associates from the West Clinic. Additionally, the breast center, radiology, radiation therapy and phlebotomy hospital-based services (hospital-based services are outlined by the dotted line on the Floor Plans) will utilize the remainder of this floor. The Methodist Germantown Breast Center is located in this space now. It will be renovated and expanded in place. The other half of the first floor is where the phlebotomy, radiology and radiation therapy departments will be located. The linear accelerator vaults and MRI and CT rooms/equipment will be located mostly in the new space added to this side of the building. Due to risks of exposure to radiation and radioactive materials, modifications in this area will exceed those of normal renovations. Lead shielding will be installed around the perimeter of the rooms for control purposes.

The second floor will house the surgery clinics, sterile processing and physician clinics. The only hospital-based space on the second floor is the surgery center with the in-house central sterile processing unit. There will be two operating rooms which will function as a department of the hospital. Another area accessible from this floor is the contemplation garden on the roof of the first floor addition. This is a unique area currently included on West Clinic's Humphreys' campus – it includes a large bell and labyrinth walking path. The garden is a respite for patients during their battle with cancer. It is also a site for celebration. The West Clinic will relocate their bell and place it in the garden atop the roof. It is a long-standing tradition that holds special meaning for patients and families; patients ring the bell after finishing their treatment plans and overcoming cancer. It is a place for healing.

The third floor will house the remainder of the administrative and clinical research space operated by the West Clinic and the UTHSC as well as pharmacy space operated by the clinics. The hospital-spaced located on this floor includes the lab, additional phlebotomy space and the infusion - or chemotherapy infusion - chairs and beds.

Since this is an existing building with existing services, the coordination and modifications are more complex than normal construction. Methodist plans to minimize disruption to patients and existing services during the renovation. The breast center will continue operations during renovations with easy access from the main door. The majority of the renovations will be on east side of the first floor and on the second and third floors. Partitions will be temporarily installed allowing the renovation area to be sealed off to minimize the noise and debris and ensure the facility is always secure. To maintain continuity of care, the relocation of equipment will be staged in a compact time frame and coordinated with the scheduling staff. The LINAC services at Methodist University Hospital, the CT services at the Germantown Diagnostic Center and MRI services at the West Clinic and Methodist Germantown Hospital will be open and prepared to accommodate any patients that need to be re-directed during the brief and planned downtime. Construction and equipment estimates account for all of these construction, installation and relocation costs as well as safety precautions. See Attachments B:III (A) and B:IV for the Plot Plan and Floor Plans.

3. Project Costs

The total cost of the project for CON purposes is \$60,554,193 with construction costs of \$16,152,175 or \$148 per square foot plus contingency of \$1,615,218 (10%) for a total of \$163 per square foot.

4. Project Funding Sources

The project costs will be funded by cash contributions from Methodist Healthcare, the parent company of the applicant.

Applicants with hospital projects (construction cost in excess of \$5 million) and other facility projects (construction cost in excess of \$2 million) should complete the Square Footage and Cost per Square Footage Chart. Utilizing the attached Chart, applicants with hospital projects should complete Parts A.-E. by identifying as applicable nursing units, ancillary areas, and support areas affected by this

November 25, 2013

11:00am

project. Provide the location of the unit/service within the existing facility along with current square footage, where, if any, the unit/service will relocate temporarily during construction and renovation, and then the location of the unit/service with proposed square footage. The total cost per square foot should provide a breakout between new construction and renovation cost per square foot. Other facility projects need only complete Parts B.-E. Please also discuss and justify the cost per square foot for this project.

Please also discuss and justify the cost per square foot for this project.

The costs of the project are reasonable and comparable to similar CON projects approved throughout the service area over the last few years. This project has an estimated cost per square foot of approximately \$145 per square foot (\$16,152,175 / 111,485 sf) or \$159 (\$17,767,393 / 111,485 sf) with construction contingency. See the cost per square foot comparison in Table 1 below.

TABLE 1
COST PER SQUARE FOOT COMPARISON WITH APPROVED PROJECTS

CON Name	Date Filed	Cost per Square Foot
Methodist University PET Renovation & Relocation	Nov-11	\$ 244
Campbell Clinic Surgery Center Construction & Renovation	Aug-12	\$ 244
The Regional Medical Center – The Med Hospital Construction & Renovation	Aug-12	\$ 225
Baptist Memorial Women's Hospital ED Construction & Renovation	Dec-12	\$ 238
Baptist Memorial Tipton Hospital Establish Cancer Center (Relocation)	Dec-12	\$ 250

If the project involves none of the above, describe the development of the proposal.
Not applicable.

- B. Identify the number and type of beds increased, decreased, converted, relocated, designated, and/or redistributed by this application. Describe the reasons for change in bed allocations and describe the impact the bed change will have on the existing services.
Not applicable.

SQUARE FOOTAGE AND COST PER SQUARE FOOTAGE CHART

A. Unit / Department	Existing Location	Existing SF	Temporary Location	Proposed Final Location	Proposed Final Square Footage			Proposed Final Cost/ SF		
					Renovated	New	Total	Renovated	New	Total
HOSPITAL-BASED										
FIRST FLOOR										
Diagnostic Phlebectomy	Off-site	275		1 st Floor	340		340	\$75		\$25,500
Imaging	Off-site	7,065		1 st Floor	6,365	3,320	9,685	\$250	\$410	\$2,952,450
Radiation Therapy	Off-site	5,416		1 st Floor	3,640	4,530	8,170	\$250	\$410	\$2,767,300
Radiation Therapy Vaults	Off-site	910		1 st Floor		2,200	2,200		\$800	\$1,760,000
Consolidated Women's Diagnostic and Breast Center	On & Off-site	20,700		1 st Floor	13,675		13,675	\$90		\$1,230,750
SECOND FLOOR										
Ambulatory Surgery Center	N/A	N/A		2 nd Floor	8,600		8,600	\$210		\$1,806,000
Wings Library/Other Administrative Area	N/A	N/A		2 nd Floor	1,595		1,595	\$65		\$103,675
THIRD FLOOR										
Phlebectomy/Laboratory	Off-site	1,501		3 rd Floor	2,900		2,900	\$85		\$246,500
Outpatient Infusion	Off-site	6,736		3 rd Floor	14,100		14,100	\$75		\$1,057,500
OTHER										
Sitework	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	\$483,000
HVAC for Surgery	N/A	N/A		Roof	N/A	N/A	N/A	N/A	N/A	\$250,000
Emergency Power System	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	\$90,000
Medical Gas System	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	\$98,000
NON-HOSPITAL BASED										
FIRST FLOOR										
Lobby/Atrium Refurbishment	N/A	N/A		1 st Floor	6,800		6,800			\$306,000
Facilities/Administrative Area	Off-site	N/A		1 st Floor	3,000	200	3,200			\$240,000
SECOND FLOOR										
Lobby/Toilet Refurbishment	N/A	7,580		2 nd Floor	5,250		5,250			\$288,750
Clinics	Off-site	7,580		2 nd Floor	17,220		17,220			\$1,291,500
THIRD FLOOR										
Atrium/Public Toilet Refurbishment	N/A	N/A		3 rd Floor	5,250		5,250			\$288,750
Pharmacy	N/A	1,475		3 rd Floor	1,800		1,800			\$171,000
Administration/Finance/MD Offices/Research	N/A	N/A		3 rd Floor	10,700		10,700			\$695,500

A. Unit / Department	Existing Location	Existing SF	Temporary Location	Proposed Final Location	Proposed Final Square Footage			Proposed Final Cost/ SF		
					Renovated	New	Total	Renovated	New	Total
B. Total GSF		59,238			101,235	10,250	111,485			\$16,152,175
Total Construction cost / SF										\$145
Construction cost escalation (10% contingency)										\$1,615,218
Total Construction costs with escalation		59,238			101,235	10,250	111,485			\$17,767,393
Total Construction cost with escalation / SF										\$159

C. As the applicant, describe your need to provide the following health care services (if applicable to this application):

1. Adult Psychiatric Services
2. Alcohol and Drug Treatment for Adolescents (exceeding 28 days)
3. Birthing Center
4. Burn Units
5. Cardiac Catheterization Services
6. Child and Adolescent Psychiatric Services
7. Extracorporeal Lithotripsy
8. Home Health Services
9. Hospice Services
10. Residential Hospice
11. ICF/MR Services
12. Long-term Care Services
13. Magnetic Resonance Imaging (MRI)
14. Mental Health Residential Treatment
15. Neonatal Intensive Care Unit
16. Non-Residential Methadone Treatment Centers
17. Open Heart
18. Positron Emission Tomography
19. Radiation Therapy/Linear Accelerator
20. Rehabilitation Services
21. Swing Beds

This project includes the addition of one linear accelerator (and the relocation of one existing linear accelerator). CON approval has previously been granted for all other major moveable equipment at sites owned and operated by Methodist which are located within a four-mile radius of the proposed project site. The approved equipment will continue to serve the same community and meet the demand for services as demonstrated by current utilization. See Table 2 for a summary of other major moveable equipment for this project.

**TABLE 2
SUMMARY OF METHODIST HOSPITAL-BASED
MAJOR MOVEABLE EQUIPMENT**

	The West Clinic on Humphreys	Methodist Radiation Oncology Center	New to Market
Linear Accelerator		Existing to be relocated	New
CT Simulator		Existing to be relocated	
CT (2 units)	Existing to be relocated		
MRI 1.5T	Existing to be replaced and relocated		
PET/CT	Existing to be relocated		

D. Describe the need to change location or replace an existing facility.

This project is for the establishment of an integrated comprehensive cancer center. The key attribute of such a center is the ability to cohesively coordinate and integrate all aspects of state-of-the-art cancer care. These aspects include clinical research, collaborative patient care, education, prevention dissemination and community outreach programs.

One of the fundamental goals of this project is to consolidate and integrate the multiple sites of care owned and operated by the Methodist and the West Clinic. The sites affected by this project are two

Methodist ambulatory sites for cancer services – the Methodist Breast Center and the Radiation Oncology Center, the West Clinic’s flagship cancer center on Humphreys which contains Methodist hospital-based services and the Comprehensive Breast Center operated by the West Clinic which will integrate with Methodist’s hospital-based services. These four sites for ambulatory cancer care are all located in East Shelby County within a four-mile radius of each other – three are less than a mile apart near the intersection of Germantown Parkway and Wolf River Boulevard. See Figure 1 for a map of these sites. This project proposes to consolidate all services by renovating the existing building that houses the Methodist Breast Center on Wolf River Boulevard.

- 1) The Methodist Breast Center on Wolf River Boulevard (the site for this project) provides comprehensive breast care with digital screening and diagnostic mammography, stereotactic suites for biopsies and bone density testing.
- 2) The Methodist Radiation Oncology Center (less than a mile away from the project site on Germantown Parkway) houses a linear accelerator and CT simulator and provides a full array of radiation therapy services.
- 3) The West Clinic on Humphreys Boulevard houses physician clinics, chemotherapy, IV infusion therapy, radiology (including MRI, CT, PET/CT, ultrasound and x-ray), interventional radiology, pharmacy, lab services, pain and palliative care and genetic, nutritional and psychological counseling services.
- 4) The West Clinic’s Comprehensive Breast Center (across the street from the project site on Wolf River Boulevard) houses three breast surgeons and provides complete breast care with digital screening and diagnostic mammography, sonography, percutaneous biopsy, genetic counseling, surgical therapy, chemotherapy and clinical research.

**FIGURE 1
MAP OF METHODIST AMBULATORY CANCER SITES**



Note: The smaller medical icons are the sites to be consolidated and the larger is the project site.

Consolidation of care sites is the key logistical step that leads to the principal project goal – the establishment of a truly integrated multidisciplinary cancer care model that brings value to patients and families, payer partners and physician partners. The fragmentation of cancer care in the market today can lead to patient dissatisfaction and anxiety, unnecessary costs, duplication of services and breaks in communication between caregivers on treatment plans.

While the current sites of care are close in proximity, navigation of the multiple sites is not optimal for patients and their families. As of today, a cancer patient must travel to one location for physician and infusion services, in many cases another location for advanced imaging, another location for surgery, another location for radiation therapy and another location for oral pharmacy medications. Many times patients need to have specialized physician or provider services such as palliative care, rehabilitation services, genetic counseling, nutritional counseling and social services, our integrated

comprehensive cancer care program will have all of these service integrated into single site in the east market. Research has shown that some disparities in care are caused by the lack of access to advanced care after initial diagnosis. The transportation and navigation challenges of multiple appointments in multiple locations lead to patients lost in the system or no-shows/missed appointments. Building a comprehensive community cancer center at a single existing site known for screening and diagnostic services will significantly decrease navigation challenges and help to address disparities in care.

Additionally, the approval and implementation of Methodist's integrated cancer care delivery system will create efficiencies and operational innovation that cannot be achieved by the current delivery configuration.

- Integration will eliminate multiple admitting/discharge access points as well as the duplication of resources within these access points such as medical records systems, policies and procedures and office equipment.
- The integrated model will also support a unified back office that provides easier coordination of payment plans and simplified patient telephone access.
- Innovation such as patient reported outcomes, rapid provider learning cycles and the ability to respond to patients' symptoms in a collaborative and timely manner will improve efficiency and patient satisfaction.

Finally, advancing therapies and treatments are bringing a new level of complexity to cancer care. Treatment plans vary by cancer type, stage of the cancer and even individual patient preference. The multi-disciplinary model brings three disciplines - medical oncology, surgical oncology and radiation oncology – together for seamless coordination of care and unified treatment plan. The new care model will not only improve collaboration, but it will instill in patients a new level of confidence in caregivers and improve patient satisfaction. Upon diagnosis, cancer patients are faced with a frightening new reality. Not only have they just learned they have cancer, but they are in most cases consulting with numerous new physicians with whom they have no previous relationship. Patients' anxiety levels are heightened as they wait for various results, status reports, prognosis and treatments from the current fragmented delivery model. With the new integrated comprehensive model, patients will witness first-hand the collaboration in a single site of care. Patient appointments will be scheduled so that multi-disciplinary teams can consult with a patient during a single visit; allowing providers to share more information, obtain a more thorough view of the patients' status and provide answers more timely.

The successful implementation of a truly integrated comprehensive cancer center that consolidates multiple sites to one, eliminates fragmented care and improves patient satisfaction and outcomes is essential for the future of cancer care in the Methodist market.

E. Describe the acquisition of any item of major medical equipment (as defined by the Agency Rules and the Statute) which exceeds a cost of \$1.5 million; and/or is a magnetic resonance imaging (MRI) scanner, positron emission tomography (PET) scanner, extracorporeal lithotripter and/or linear accelerator by responding to the following:

1. For fixed-site major medical equipment (not replacing existing equipment):

The second linear accelerator is the only new major medical equipment proposed in this project. The MRI is a relocation and replacement of existing equipment.

a. Describe the new equipment, including:

- 1. Total cost ;(As defined by Agency Rule).** Equipment cost \$1,916,102 plus maintenance \$1,040,000 for total of \$2,956,102
- 2. Expected useful life of a Linear Accelerator** is 7 years.
- 3. List of clinical applications to be provided;**

“A linear accelerator (LINAC) is latest in radiation technology used for external beam radiation treatments for patients with cancer. The linear accelerator is used to treat all

parts/organs of the body. It delivers high-energy x-rays to the region of the patient's tumor. These x-ray treatments can be designed in such a way that they destroy the cancer cells while sparing the surrounding normal tissue. The LINAC is used to treat all body sites, using conventional techniques, Intensity-Modulated Radiation Therapy (IMRT), Image Guided Radiation Therapy (IGRT) Stereotactic Radiosurgery (SRS) and Stereotactic Body Radio Therapy (SBRT)." (*source: <http://www.radiologyinfo.org/en/info.cfm?pg=linac>*).

The equipment is optimized for both radiotherapy and radiosurgery and can treat cancers almost anywhere in the body, including lung, breast, abdomen and head and neck cancers.

4. Documentation of FDA approval. See Attachment B: II (E) for FDA certification.

b. Provide current and proposed schedules of operations.

Center hours will be 7:00 am - 8:00 pm Monday – Friday with additional Saturday hours. LINAC services will be available between 7:00 am - 7.00 pm Monday – Friday.

2. For mobile major medical equipment: Not Applicable

- a. List all sites that will be served;
- b. Provide current and/or proposed schedule of operations;
- c. Provide the lease or contract cost.
- d. Provide the fair market value of the equipment; and
- e. List the owner for the equipment.

3. Indicate applicant's legal interest in equipment (i.e., purchase, lease, etc.) In the case of equipment purchase include a quote and/or proposal from an equipment vendor, or in the case of an equipment lease provide a draft lease or contract that at least includes the term of the lease and the anticipated lease payments.

The linear accelerator is the only new major moveable equipment proposed; the MRI is a replacement of existing equipment. Please see Attachments B:II (E) (3) for the quote on purchase of the equipment.

III. (A) Attach a copy of the plot plan of the site on an 8 1/2" x 11" sheet of white paper which must include:

See Attachment B:III (A) for the plot plan.

1. Size of site (*in acres*);
2. Location of structure on the site; and
3. Location of the proposed construction.
4. Names of streets, roads or highway that cross or border the site.

Please note that the drawings do not need to be drawn to scale. Plot plans are required for all projects.

(B) Describe the relationship of the site to public transportation routes, if any, and to any highway or major road developments in the area. Describe the accessibility of the proposed site to patients/clients.

The West Cancer Center will be located near the corner of Wolf River Boulevard and Germantown Road, which makes it easily accessible for area patients via automobile and ambulance. Germantown Road runs north-south from I-40 to Highway 385 (the new suburban loop in Shelby County that encircles the eastern region of the county). Wolf River Boulevard is less than 1.5 miles south of the

Walnut Grove Road and Germantown Road intersection. Both Walnut Grove Road and Germantown Road have their own exits from nearby expressways: Walnut Grove from I-240 and Germantown Road from Highway 385.

The Memphis Area Transit Authority (MATA) services this area with route 82. Appropriate bus schedules and road maps are included as Attachment B:III (B).

IV. Attach a floor plan drawing for the facility which includes legible labeling of patient care rooms (noting private or semi-private), ancillary areas, equipment areas, etc. on an 8 1/2" x 11" sheet of white paper.

NOTE: DO NOT SUBMIT BLUEPRINTS. Simple line drawings should be submitted and need not be drawn to scale.

See Attachment B:IV. for the floor plans.

V. For a Home Health Agency or Hospice, identify:

Not applicable; the application is not for a home care organization.

1. Existing service area by County;
2. Proposed service area by County;
3. A parent or primary service provider;
4. Existing branches; and
5. Proposed branches.

SECTION C: GENERAL CRITERIA FOR CERTIFICATE OF NEED

In accordance with Tennessee Code Annotated § 68-11-1609(b), “no Certificate of Need shall be granted unless the action proposed in the application for such Certificate is necessary to provide needed health care in the area to be served, can be economically accomplished and maintained, and will contribute to the orderly development of health care.” The three (3) criteria are further defined in Agency Rule 0720-4-.01. Further standards for guidance are provided in the state health plan (Guidelines for Growth), developed pursuant to Tennessee Code Annotated §68-11-1625.

The following questions are listed according to the three (3) criteria: (I) Need, (II) Economic Feasibility, and (III) Contribution to the Orderly Development of Health Care. Please respond to each question and provide underlying assumptions, data sources, and methodologies when appropriate. **Please type each question and its response on an 8 1/2" x 11" white paper.** All exhibits and tables must be attached to the end of the application in correct sequence identifying the question(s) to which they refer. If a question does not apply to your project, indicate “Not Applicable (NA).”

QUESTIONS

1. Describe the relationship of this proposal toward the implementation of the State Health Plan and Tennessee’s Health: Guidelines for Growth.

- a. Please provide a response to each criterion and standard in Certificate of Need Categories that are applicable to the proposed project. Do not provide responses to General Criteria and Standards (pages 6-9) here.

Please see the following responses to the Criteria for Construction, Renovation, Expansion and Replacement of Health Care Institutions as well as the Criteria for Megavoltage Radiation Therapy Services. These are the only two categories that apply.

- b. Applications that include a Change of Site for a health care institution, provide a response to General Criterion and Standards (4)(a-c)

Project-Specific Review Criteria: Construction, Renovation, Expansion, and Replacement of Health Care Institutions

- 1. Any project that includes the addition of beds, services, or medical equipment will be reviewed under the standards for those specific activities.**

Not applicable for beds. On the following pages, please find the response to the Standards and Criteria for Linear Accelerator services. Methodist already has approval for MRI and PET services which are being consolidated at this site from multiple facilities located within one to four miles from the project site.

- 2. For relocation or replacement of an existing licensed healthcare institution:**

- a. The applicant should provide plans, which include costs for both renovation and relocation, demonstrating the strengths and weaknesses of each alternative.
- b. The applicant should demonstrate that there is acceptable existing of projected future demand for the proposed project.

The spaces currently occupied by the ambulatory cancer centers are scattered throughout the area. With the need to consolidate services into an integrated comprehensive center as well as expand hospital-based diagnostic and therapeutic

services, renovation of current locations is not feasible – there is insufficient space at existing sites. It is not possible to demonstrate costs for this option. This would be an expensive and inappropriate exercise for the applicant's design team.

Detailed justification for this project can be found in Section C (3) below. Both a. and b. above are responded to in the narrative beginning below.

3. For renovation or expansions of an existing licensed healthcare institution:

a. The applicant should demonstrate that there is an acceptable existing demand for the proposed project.

The applicant's mission embodies the spirit of the Guidelines for Growth and the Five Principles to Achieve Better Health as outlined in the State Health Plan. Methodist Healthcare's mission is to partner with its medical staffs and collaborate with its patients and families to be the leader in high quality, cost effective health care in all sectors of its service area. Its geographical distribution makes Methodist the area provider with the largest number of entry points, and the most socio-economically diverse patient population. This project complies with the mission and the tenants of the State Health Plan and Guidelines for Growth.

DEMAND FOR THE PROJECT

The Mid-South is a community of approximately 3.5 million people within the 125 mile radius of downtown Memphis. As a tri-state provider, Methodist must continuously monitor changing trends in health status as well as demographic, epidemiologic, behavioral and economic characteristics of the population served to remain an informed and reliable community contributor. Methodist is committed to meeting the health care needs of the varied communities it serves by maintaining/ expanding/ transforming existing services, developing new programs and aligning with other regional and national partners in health.

The most notable demographic changes in the service area over the last ten years have been the rapid population growth of suburban and exurban areas, such as DeSoto County, and the aging of the population. Planning studies by Methodist indicate that these trends will continue. It is particularly significant that during this period, the area population aged 65 years and older - the group that most needs health and cancer care - accounts for 85% of the total population growth. The number of people 65 and older will increase in the next ten years by more than 67,500 persons, or 45%, which is almost double the entire population of Fayette County. See Table 3 for population estimates by county.

TABLE 3
POPULATION ESTIMATES BY COUNTY 2013- 2023
METHODIST SERVICE AREA

County	Age Cohort	Projected 2013	Projected 2018	Projected 2023	2013-2023 Change	% Change
Shelby, TN	Total	943,588	971,931	1,005,212	61,624	7%
	65 & over	106,233	129,053	156,775	50,542	48%
Tipton, TN	Total	61,519	62,561	63,891	2,372	4%
	65 & over	7,495	8,898	10,564	3,069	41%
Fayette, TN	Total	38,617	39,169	39,958	1,341	3%
	65 & over	6,298	7,417	8,735	2,437	39%
DeSoto, MS	Total	167,335	175,657	184,969	17,634	11%
	65 & over	18,606	22,475	27,149	8,543	46%
Marshall, MS	Total	36,340	35,335	34,503	-1,837	-5%
	65 & over	5,039	5,674	6,389	1,350	27%
Crittenden, AR	Total	50,052	49,201	48,499	-1,553	-3%
	65 & over	5,839	6,573	7,399	1,560	27%
Total Service Area	Total	1,297,451	1,333,854	1,377,033	79,582	6%
	65 & over	149,510	180,090	217,010	67,500	45%
Source: Projected 2013 & 2018 per Truven Healthcare Analytics- Market Expert; Projected 2023 calculated with CAGR 2013-18						

The aging of the population is significant for this project because cancer incidence and mortality rates increase exponentially with advancing age – age becomes a high risk factor for cancer. Cancer incidence rates nationally for people over 65 are nine times higher than rates for younger people; and cancer mortality rates are eighteen times higher. Additionally, the elderly are burdened with the prevalence of many diseases and conditions which in combination make health care services for the elderly more complex.

TABLE 4
NATIONAL AGE-ADJUSTED CANCER RATES, 2006-2010

Age at Diagnosis or Death	Age-Adjusted Incidence Rates			Age-Adjusted Death Rates		
	All Races	Whites	Blacks	All Races	Whites	Blacks
All ages	463.0	471.9	483.6	176.4	175.8	210.3
Under 65	224.2	228.1	244.2	56.1	54.8	76.0
65 and over	2,113.7	2,157.0	2,138.6	1,008.4	1,012.0	1,138.9
Source: National Cancer Institute - Surveillance, Epidemiology and End Results Program (SEER)						

With the aging of the Mid-South population, the demand for cancer services is expected to increase over the next ten years. Yet, communities within the service area already exceed state and national cancer incidence and mortality rates. For instance, Shelby, Fayette and Tipton counties in Tennessee have

incidence rates higher than national averages for all cancers. See Table 5 for the incidence rates by county, state and race compared to national trends.

However, just as—if not even more—significant are the racial disparities in cancer rates for Shelby County and the surrounding communities. Research shows that the black population tends to have higher occurrences of cancer as compared to whites. Given the high incidence of cancer in Shelby County, the differences between mortality rates by race were analyzed. The blacks in the community die disproportionately from all cancers when compared to other races.

TABLE 5
CANCER INCIDENCE AND DEATH RATES, 2006-2010
METHODIST TENNESSEE SERVICE AREA

Region	Annual Incidence Rates			Death Rates		
	All Races	White (including Hispanic)	Black (including Hispanic)	All Races	White (including Hispanic)	Black (including Hispanic)
Shelby County, TN	461.9	448.4	472.3	210.3	176.9	259.3
Fayette County, TN	472.2	465.5	495.2	189.0	168.6	256.9
Tipton County, TN	494.4	492.6	473.3	223.9	221.7	232.3
Tennessee	469.9	468.8	472.6	199.1	194.3	244.1
United States	453.7	452.8	468.5	176.4	175.8	210.3

Source: National Cancer Institute – State Cancer Profiles 2006-2010

In further analyses, it was determined that death rates from breast cancer and lung/bronchus cancer were the highest cancer mortality rates for Shelby County (see tables 6 and 7). Again racial disparity is prevalent and significant for cancer mortality rates. Black women die from breast cancer and black men die from lung cancer at much higher rates than whites in Shelby County for the period measured. Furthermore, in a recent study conducted by Sinai Urban Health Institute, the Metropolitan Chicago Breast Cancer Task Force and Avon Foundation Cancer Crusade, Memphis was identified as the city with the largest disparity in breast cancer mortality rates between black and white women. There is a need for outreach, screening and education in the black communities to eliminate the disparities and reduce the number of deaths.

TABLE 6
ANNUAL BREAST CANCER DEATH RATES BY RACE, 2006-2010
METHODIST TENNESSEE SERVICE AREA

Region	Breast Cancer (Females)		
	Annual Death Rate per 100,000 All Races	Annual Death Rate per 100,000 White	Annual Death Rate per 100,000 Black
Shelby County, TN	30.0	21.0	41.7
Fayette County, TN	30.5	29.1	n/a
Tipton County, TN	22.4	19.3	n/a
Tennessee	23.3	21.6	35.4
United States	22.6	22.1	30.8

Source: National Cancer Institute - State Cancer Profiles, 2006-2010; Death Rates based on Bias-Adjusted Modeled Estimates

TABLE 7
ANNUAL LUNG/BRONCHUS DEATH RATES BY RACE, 2006-2010
METHODIST TENNESSEE SERVICE AREA

Region	Lung/Bronchus (Females)			Lung/Bronchus (Males)		
	Annual Death Rate per 100,000 All Races	Annual Death Rate per 100,000 White	Annual Death Rate per 100,000 Black	Annual Death Rate per 100,000 All Races	Annual Death Rate per 100,000 White	Annual Death Rate per 100,000 Black
Shelby County, TN	42.4	42.3	42.3	80.0	67.0	100.8
Fayette County, TN	41.8	49.7	n/a	75.9	67.4	115.5
Tipton County, TN	54.1	52.9	n/a	97.0	100.4	n/a
Tennessee	46.6	47.3	44.0	89.5	88.7	100.8
United States	39.2	40.4	37.2	63.5	63.2	78.5

Source: National Cancer Institute - State Cancer Profiles, 2006-2010; Annual Death Rates based on Bias-Adjusted Modeled Estimates

Over the last decade, the cancer care landscape has changed dramatically, with new advances and treatments, changes in reimbursement and the continued threat of regulatory driven health care reform. These threats are occurring while the same provider community is facing a significant projected increase in the number of cancer patients due to an ever-aging population. This anticipated increase in cancer patients could cripple the current cancer delivery system. Local health care systems have made significant efforts to build partnerships and pursue orderly development of collaborative systems of care in the past, yet a significant portion of cancer care delivery in the market is still fragmented. Chemotherapeutic infusion, radiation oncology, cancer specific surgery, interventional radiology and medical oncology services are still delivered in different locations with weak coordination of efforts and collaboration. Methodist must prepare an efficient and cohesive cancer care system in order to face the coming challenges.

There is only one dominant strategy for cancer care providers to consider. It is the development of a collaborative, integrated multidisciplinary cancer program. Cancer providers that clearly and efficiently develop and operationalize this approach will create higher standards of care, complex treatment options, better research opportunities and access to multi-phase clinical trials. This type of care program will increase patient's knowledge and care expectations by experiencing a system designed to reduce or eliminate disparate experiences of care. Many studies show that fragmented care delivery, i.e. patients treated by multiple providers at multiple locations, will not be able to provide an enhanced quality of care with the expected changes in reimbursement and the expected increase in patient volume.

In an article from *Managed Care Oncology*, Dr. John S. Macdonald, chief medical officer of Aptium Oncology, an oncology consulting and management company with cancer centers across the nation, states, "It makes intuitive sense to move more and more to cancer programs without walls. It makes sense to bring together all the experts in the diagnosis and treatment of cancer for all types of patients and to centralize everyone who impacts patient care in a single location. That's why, in the broadest sense, we expect to see continued strong growth in the multidisciplinary approach to cancer care."

From a planning perspective, a multidisciplinary cancer program is a complex and difficult challenge that calls for a strategic and collaborative approach. The Advisory Board Oncology Roundtable's 2007 Patient Experience Survey discovered that patients point to a multidisciplinary approach to cancer care as "the most valued service." Methodist's response to the challenge was in collaboration with The West Clinic

Oncologists have always played the key role in cancer care, and no matter what, the success of a multidisciplinary program depends on the skills and competencies of the supporting care team. The West Clinic is the region's premier provider of cancer care and is a nationally-recognized leader in cancer research. Over the past 33 years West Clinic has built an expert team dedicated to excellence and compassionate care. The West Clinic currently has over 30 physicians in multidisciplinary specialties and multiple locations in Tennessee, Mississippi and Arkansas providing services to include medical oncology/hematology, gynecologic oncology, blood cell transplants, breast surgery, diagnostic and interventional radiology, metabolic bone disease/endocrinology, clinical psychology, pain and palliative care, radiation oncology, comprehensive breast center, nutritional counseling, ACORN research and the WINGS Cancer Foundation. The multi-disciplinary team includes pharmacists, nurses, clinical technicians, social workers and patient care coordinators/navigators. The full care team is committed to working collaboratively to ensure a seamless treatment program.

The specific mission of the applicant with regard to cancer is to develop the Mid-South's first truly integrated cancer program. The development of integrated comprehensive cancer care program will reduce the disparity between national cancer mortality rates and those of Shelby County. Such a program will allow for Methodist to prepare for the anticipated increase in cancer as the population ages. There are double digit growth rates for the Methodist service area in the next decade.

TABLE 8
CANCER INCIDENCE PERCENTAGE INCREASE FROM 2012 RATES, 2017 and 2022
BY CANCER TYPE BY COUNTY

Cancer Type	Shelby		Fayette		Tipton		DeSoto	
	2017	2022	2017	2022	2017	2022	2017	2022
Brain and Nervous System	9%	18%	6%	11%	7%	14%	12%	25%
Breast	9%	17%	6%	10%	8%	15%	14%	27%
GI	12%	24%	9%	16%	11%	22%	17%	34%
Gynecologic	9%	17%	6%	10%	9%	15%	14%	27%
Head and Neck	11%	22%	7%	12%	10%	18%	16%	32%
Hematological	11%	23%	9%	16%	11%	21%	15%	32%
Lung	15%	30%	11%	20%	14%	27%	19%	40%
Melanoma	9%	19%	7%	12%	9%	16%	14%	28%
Urological	15%	28%	10%	16%	13%	23%	19%	38%
Source: Advisory Board – Cancer Incidence Forecaster								

The only course of action is to simultaneously prepare for the increase in incidence and work to decrease incidence rates, mortality rates and racial disparities in cancer care by developing, managing and investing in an integrated comprehensive cancer care program.

FIVE PRINCIPALS TO ACHIEVE BETTER HEALTH

Healthy Lives:

The purpose of the State Health Plan is to improve the health of Tennesseans.

Every person's health is the result of the interaction of individual behaviors, society, the environment, economic factors, and our genetic endowment. The State Health Plan serves to facilitate the collaboration of organizations and their ideas to help address health at these many levels.

As a faith-based, mission-driven health care organization and the largest provider of TennCare in the state, Methodist believes the organization is charged with improving and changing the well-being of the community. Despite providing these services to the community for over 88 years, vast disparities in health, income and access remain constant in Memphis. These disparities lead to poor health outcomes as well as higher health care costs. We are developing strategies to not only provide access to better health care, but more importantly, to identify those areas for which urgent intervention is required.

This project has two major components targeting community health and demonstrating Methodist's commitment to the principal of Healthy Lives - community outreach and prevention programs and a sustainable research program - both of which will rely on the cancer care services at the new comprehensive center.

Community Outreach:

The new comprehensive cancer center will, among other programs, provide staff, equipment and resources for a community lung cancer screening program. The Methodist mission ensures access to all community members including the uninsured and underinsured. The program will provide outreach to community organizations such as the American Cancer Society, Church Health Center, Healthy Shelby and local employers to tackle the higher than average rate of lung cancer in the community. The ability to evaluate through physician services, diagnose through advanced imaging and treat through infusion and radiation all in one site, regardless of ability to pay is a must in for the Mid-South.

A similar plan is also currently in operation for breast cancer patients, yet the biggest challenge to that outreach program is transportation to so many different sites for care. The development of the integrated comprehensive cancer program will eliminate that challenge. Current breast cancer efforts are focused on the significant racial disparities identified in a recent study conducted by Sinai Urban Health Institute, the Metropolitan Chicago Breast Cancer Task Force and Avon Foundation Cancer Crusade. Memphis was identified as the city with the largest disparity in breast cancer mortality rates between non-Hispanic Black and non-Hispanic White women. With non-Hispanic Black women comprising the majority of our female population over the age of 25, Memphis is uniquely positioned to study and address the significant racial disparity in the breast cancer mortality rates. Collaboration between Methodist, the West Clinic and the Methodist Congregational Health Network (a covenantal relationship among Methodist, over 500 Mid-South congregations and community health organizations) provide additional structures and a broader framework with which to evaluate these disparities. Grant dollars have been procured to establish patient navigators and examine the potential impact of the differences in screening and care pathways on mortality rates of these populations.

Research:

The West Cancer Center is already providing access to over 35 clinical pharmacological trials. The completion of the integrated comprehensive cancer care delivery system will feature vigorous interactions across research areas and facilitate collaboration between laboratory, behavioral, epidemiologic and clinical scientists and the scientific programs of which they are a part. These collaborations will facilitate rapid transfer of clinical observations to laboratory experiments and promising discoveries in the laboratory to innovative behavioral and medical applications in prevention, detection, diagnosis, treatment and survivorship. This one of a kind program for the Mid-South

community is due to the participation from the Memphis-based UTHSC. The UTHSC is one of the pillars of support to promote basic discovery and transdisciplinary interactions between scientists engaged in laboratory research and, where possible, to stimulate collaborations among investigators in basic laboratory and other research areas.

Integrated cancer centers not only generate new knowledge through research but also interact within their communities to assure that new knowledge benefits systems, providers and people. Through this integrated cancer center, the West Cancer Center will be an active participant in state and community comprehensive cancer control planning and implementation. Medical advances developed within the center will be made available to people outside the center as rapidly as possible via professional and public education, as well as partnerships with public health or clinical service delivery systems. The center will support the translation of intervention programs into public health or clinical practice. The proposed project will provide the relationships and organizational infrastructure required for conducting research that improves dissemination, education, communication and ultimately enhances population health.

Access to Care:

Every citizen should have reasonable access to health care.

Many elements impact one's access to health care, including existing health status, employment, income, geography, and culture. The State Health Plan can provide standards for reasonable access, offer policy direction to improve access, and serve a coordinating role to expand health care access.

The MLH mission is to provide high quality, cost-effective patient- and family-centered health care to all sectors of the greater Memphis service area. As part of its mission, Methodist has strategically placed and maintained hospitals and ambulatory facilities in Fayette County, DeSoto County and all quadrants of Shelby County. Its geographical distribution makes Methodist the area provider with the largest number of entry points and the most socio-economically diverse patient population.

Already providing unparalleled health care access to the community, the development of the integrated comprehensive cancer care delivery system will further enhance access to all community members. Since the initial launch of the cancer integration plan, the percentage of uninsured and underinsured at the ambulatory cancer sites has increased from 2% to almost 9% (over 1,700 people in total) in just 18 months. These are patients who are without funds and/or insurance and face barriers to access health care; they have potentially not had access to community ambulatory cancer care before. Extending the Methodist mission throughout the West Cancer Center furthered the reach of high quality cancer care into the service area. With the approval this project, this unmatched access to cancer care will continue and expand.

As noted previously, the integrated multi-disciplinary center will significantly decrease the challenge of patients lost to a complex system by reducing the sites of care to one, establishing care support navigators to ensure seamless transitions in care and reducing disparities of care by removing barriers to advanced care and treatments. One of the fundamentals of an integrated comprehensive cancer care delivery system is the role of the care support navigator. One of the unique and most powerful aspects of this project is the implementation of full cancer navigation. Many systems have breast cancer navigators, yet no other system in the Mid-South has implemented a full continuum navigation program. These navigators introduce themselves directly to patients at their first appointments and provide support and navigation across all care sites throughout all stages of therapy and treatment. The system navigators are a mix of nurses, social workers and care support coordinators whose jobs are to enhance patients' experience and ensure patients are not lost to a complex system.

Economic Efficiencies:

The state's health care resources should be developed to address the needs of Tennesseans while encouraging competitive markets, economic efficiencies and the continued development of the state's health care system.

The State Health Plan should work to identify opportunities to improve the efficiency of the state's health care system and to encourage innovation and competition.

The approval and implementation of Methodist's integrated cancer care delivery system will create efficiencies and operational innovation that cannot be achieved by the current delivery system. As noted previously, integration and consolidation of sites of care will eliminate duplication of services, eliminate redundant systems, create a unified back office and reduce overhead expenses for operations of multiple sites. Innovation such as patient reported outcomes, rapid provider learning cycles and the ability to respond to patients' symptoms in a collaborative and timely manner will improve efficiency and patient satisfaction.

Additionally, the collaboration with payers will be enhanced. Cost controls are increasingly part of the quality conversation in health care, and the systematic identification and elimination of waste while maintaining or improving quality is imperative for future success. The truly integrated care delivery model is the foundation for innovative reimbursement and value-based models such as episodes of care, bundled payments and even an oncology medical home. These systems will also be available to both governmental payers as innovative collaborative delivery models focus on outcomes and quality instead of fee for service health care.

Quality of Care:

Every citizen should have confidence that the quality of health care is continually monitored and standards are adhered to by health care providers.

Health care providers are held to certain professional standards by the state's licensure system. Many health care stakeholders are working to improve their quality of care through adoption of best practices and data-driven evaluation.

Patient safety and quality are central areas of focus for Methodist and its affiliates. The framework for Methodist's approach to systematic quality improvement includes the following dimensions: safe, timely, effective, efficient, equitable, patient-centered, accessible and sustainable flows. Yet, the cancer care delivery in the service area is still fragmented even with significant efforts of local health systems challenging status quo and working towards more seamless care paths. As already mentioned, patients and families have to travel to different access points for cancer care. Chemotherapeutic infusion, radiation oncology, cancer specific surgery, interventional radiology and medical oncology services are still delivered in different locations with weak coordination of efforts and collaboration. This uncoordinated fractionization continues to challenge our community to fundamentally change the cancer delivery system.

Over the last decade, the cancer care landscape has changed dramatically, with new advances and treatments, changes in reimbursement, and the continued threat of regulatory driven health care reform. These threats are occurring while the same provider community is facing an anticipated huge increase in the number of cancer patients due to an ever aging population. This anticipated increase in cancer patients could cripple the current cancer delivery system. In order to be innovative, collaborative and effect change we must implement a strategy that consists of the development and implementation of a collaborative integrated multidisciplinary cancer program. Such a disciplined program will lead to higher standards of care, complex treatment options, better research opportunities, and access to multi phase clinical trials.

The new integrated cancer delivery model will provide a first of its kind, in our community, cancer urgent care center. This center is designed to significantly decrease the number of patients forced to visit emergency rooms due to reactions from treatment during their care. The re-direction of patients to

a cancer urgent care center will eliminate the need for additional diagnostic testing or lab procedures in emergency room setting. Patients accessing the cancer urgent care center would have medical records immediately available, and specialty trained cancer providers present to address the urgent needs of cancer patients.

Health Care Workforce:

The state should support the development, recruitment, and retention of a sufficient and quality health care workforce.

The state should consider developing a comprehensive approach to ensure the existence of a sufficient, qualified health care workforce, taking into account issues regarding the number of providers at all levels and in all specialty and focus areas, the number of professionals in teaching positions, the capacity of medical, nursing, allied health and other educational institutions, state and federal laws and regulations impacting capacity programs, and funding.

To ensure the success of the new integrated cancer delivery system, Methodist and its collaborative partners have committed to investing in the integrated cancer programs with a particular focus on recruiting selected specialists and researchers into the West Tennessee community. To date the collaboration has successfully added to the oncology bench strength as follows:

1. Two fellowship-trained specialty surgical oncologist
2. A fellowship-trained thoracic specialty oncology surgeon
3. A specialty-trained benign hematologist specializing in hemophilia
4. A committed phase one researcher from the University of Arizona who sole function is to provide our community with access to phase one trials without leaving home
5. Formally funded the continuation of a medical oncology fellowship program for eleven medical oncologists trained in our community
6. Five soon to be seven person navigation team
7. Three genetic counselors – two from outside the community
8. Four data analysts devoted to developing of innovative health reimbursement models, outcome studies and quality metrics

The continued focus and commitment to truly altering the cancer delivery model in the community is unprecedented. Efficiencies gained from the new delivery models will support the redeployment of personnel in positions that are no longer needed into other aspects of the cancer delivery system. This could include information technology, data analytics, customer navigation and other ancillary clinical care functions. There are not any significant reductions anticipated in current work force, simply more efficiency and better alignment with patient and families needs.

Project-Specific Review Criteria: Megavoltage Radiation Therapy Services

1. Utilization Standards for MRT Units.

- a. **Linear Accelerators not dedicated to performing SRT and/or SBRT procedures.**
 - i. **Full capacity of a Linear Accelerator MRT unit is 8,736 procedures, developed from the following formula: 3.5 treatments per hour, times 48 hours (6 days of operation, 8 hours per day, or 5 days of operation, 9.6 hours per day), times 52 weeks.**
 - ii. **Linear Accelerator Minimum Capacity: 6,000 procedures per Linear Accelerator MRT Unit annually, except as otherwise noted herein.**
 - iii. **Linear Accelerator Optimal Capacity: 7,688 procedures per Linear Accelerator MRT Unit annually, based on 12% average downtime per MRT units during normal business hours annually.**

- iv. **An applicant proposing a new Linear Accelerator should project a minimum of at least 6000 MRT procedures in the first year of service, building to a minimum of 7,688 procedures per year by the third year of service and for every year thereafter.**

Methodist bases projections on national cancer incidence rates and applies the rates against local population projections which factor in the aging population and overall growth. The projections assume Methodist captures current share of market growth plus nominal growth from regional outreach efforts. Projections meet the minimum requirements. See Tables 9 and 10 for the factors and calculations followed for a summary of the methodology.

**TABLE 9
PROJECTED LINAC UTILIZATION**

	Year 1	Year 2
Procedures	14,221	15,430
Procedures per Unit	7,111	7,715

TABLE 10
FACTORS AND CALCULATIONS FOR LINAC PROJECTIONS

		Year 1	Year 2	
Projection of Local Cancer Incidence	2013	2016	2017	2018
Projected Market Procedures				
Under 65	1,147,941	1,151,431	1,152,597	1,153,764
65 and Over	149,510	167,171	173,510	180,090
Total	1,297,451	1,318,603	1,326,108	1,333,854
National Cancer Incidence Rates per 100,000				
Under 65	224.2	224.2	224.2	224.2
65 and Over	2,113.7	2,113.7	2,113.7	2,113.7
Projected Service Area Cancer Incidence				
Under 65	2,574	2,582	2,584	2,587
65 and Over	3,160	3,534	3,667	3,807
Total	5,734	6,115	6,252	6,393
% Growth over 2013 Incidence Rates		107%	109%	112%
Projected LINAC Procedures in Market Based on Population Aging/Growth				
Cumulative Incremental Procedures in Market	-	3,946	5,360	6,827

Projection of Methodist Procedures	2013	2016	2017	2018
Methodist Projected Procedures				
Cumulative Growth from Population (40%)	-	1,578	2,144	2,731
Cumulative Projected Regional Growth	-	1,488	2,265	3,059
Methodist Current Volumes	23,756	23,756	23,756	23,756
Total Projected Procedures	23,756	26,822	28,165	29,546
Projected Procedures by Site of Service				
West Cancer Center	11,462	14,221	15,430	16,673
Methodist University Hospital	12,294	12,601	12,735	12,873
Total	23,756	26,822	28,165	29,546
Average Procedures per Unit				
West Cancer Center	11,462	7,111	7,715	8,336
Methodist University Hospital	6,147	6,301	6,368	6,437
Total	7,919	6,706	7,041	7,387

METHODOLOGY:

PROJECTIONS OF LOCAL CANCER INCIDENCE:

- As noted previously, the incidence of cancer increases significantly for the elderly. Projections split the population into two age groups – under 65 years of age and over – to account for this trend.
- To keep it simple the national overall cancer incidence rate per 100,000 for all races was used. This approach is conservative since demographics show the Methodist service area has a higher percentage of blacks living in the community than national trends (Table 15 shown in response to Section C (4)(A)), and show that local cancer incidence rates for blacks are higher than whites (Table 5 shown in response to Section C (3)(a)).
- Calculations show that between 2013 and 2018 the local incidence of cancer grows by approximately 12% based on population trends. Assuming a similar growth (12% over 5 years) in LINAC procedures, incremental procedures were projected for the market using 2012 State Equipment Registry utilization of LINACs in the service area of 59,365 (excluding St. Jude Children's Hospital).

PROJECTION OF METHODIST LINAC PROCEDURES:

- Calculations assume Methodist will maintain current market share attracting 40% of the market growth.
 - Calculations also assume Methodist continues to be successful with regional outreach opportunities extending high quality cancer services outside the primary service area. Projections include minimal 2% growth annually for 2014-2016 and 3% beginning in year 2 (2017) once the West Cancer Center is established. This again is conservative since procedures grew by 12% in from 2011 to 2012 when the affiliation with the West Clinic and the UTHSC was fully established and regional outreach began.
 - Calculations assume no growth in 2013 - again to be conservative - and use 2012 utilization as the base year.
 - Final projections show 26,822 LINAC procedures performed by Methodist in year 1 (2016) and 28,165 in year 2 (2017).
 - The majority of the projected growth at Methodist will be at the newly established West Cancer Center – versus the equipment housed at Methodist University Hospital - and the new LINAC will lessen the load on the old equipment in Germantown balancing utilization between the two for an average number of procedures per unit for 7,111 in year 1 and 7,715 in year 2 which is above the minimum thresholds.
- For Linear Accelerators dedicated to performing only SRT procedures, full capacity is 500 annual procedures.**
Not Applicable
 - For Linear Accelerators dedicated to performing only SRT procedures, full capacity is 850 annual procedures.**
Not Applicable
 - An exception to the standard number of procedures may occur as new or improved technology and equipment or new diagnostic applications for Linear Accelerators develop. An applicant must demonstrate that the proposed Linear Accelerator offers**

a unique and necessary technology for the provision of health care services in the proposed Service Area.

Not Applicable

- e. **Proton Beam MRT Units.** As of the date of the approval and adoption of these Standards and Criteria, insufficient data are available to enable detailed utilization standard to be developed for Proton Beam MRT Units.

Not Applicable

2. Need Standards for MRT Units.

- a. **For Linear Accelerators not dedicated solely to performing SRT and/SBRT procedures, need for a new Linear Accelerator in a proposed Service Area shall be demonstrated if the average annual number of Linear Accelerator procedures performed by existing Linear Accelerators in the proposed Service Area exceeds 6,000.**

The combined average utilization of existing LINAC units in the service area is 5,527 in 2012 for all providers based on the State Equipment Registry data. Yet, St. Jude Children's Research Hospital is an internationally recognized pediatric hospital dedicated to research and treatment for children with cancer and other catastrophic diseases. St. Jude is caring for a unique population of patients. Excluding St. Jude's volumes and equipment from the market calculation, the average for LINAC volumes per unit is 6,596 in 2012 which is well above the 6,000 threshold. See Table 11 for LINAC market utilization.

**TABLE 11
METHODIST SERVICE AREA
LINEAR ACCELERATOR EQUIPMENT AND UTILIZATION, 2010-2012**

Facility Type	Facility	2010		2011		2012	
		Procs	# of Units	Procs	# of Units	Procs	# of Units
HOSP	Methodist Healthcare	21,287	3	21,049	3	23,756	3
HOSP	Baptist Memorial Hospital-Memphis	10,989	3	11,343	3	11,052	2
ASTC	Baptist Memorial Hospital-Tipton/Germantown	7,365	1	5,270	1	7,610	1
HOSP	Regional Medical Center at Memphis (The Med) ¹	87	1	-	-	-	-
HOSP	St. Francis Hospital – Park	7,508	2	7,576	2	6,795	2
HOSP	St. Jude Children's Research Hospital	5,789	2	4,800	2	1,437	2
HOSP	Baptist Memorial Hospital – DeSoto	7,152	1	7,187	1	10,152	1
Total Procedures		60,177	13	57,225	12	80,802	11
Average Procedures per Unit		4,629		4,769		5,527	
Total Procedures without St. Jude		53,388	11	52,425	10	59,365	9
Average Procedures per Unit without St. Jude		4,944		5,243		6,596	
Source: 2008-10 TN HSDA - State Equipment Registry; and 2009-2012 MS DOH - State Health Plan							
¹ The Regional Medical Center at Memphis closed Linear Accelerator Services in 2010							

Additionally, Methodist demonstrates a growing need for an additional LINAC based on current and projected utilization. Methodist currently operates three LINACs - two at the Methodist University Hospital in downtown Memphis and one at the Methodist Radiation Oncology Center in Germantown less than a mile from the project site. Yet, the patient population seeking services from Methodist equally prefers the convenience of the freestanding ambulatory setting in the east market and the academic setting in the downtown Medical Center. Methodist utilization is almost evenly split between the two sites, thus taxing the Germantown equipment while keeping the downtown equipment at solid volumes above the minimum threshold. The single unit in Germantown performs more than 11,000 annually as compared to 8,736 which is the State Health Plan's definition of full capacity – this is 130% of full capacity. A Methodist planning study validated this finding by comparing average treatments per unit to national averages - the Germantown unit operates significantly above the national 75th percentile. Methodist must add LINAC in the east market to accommodate the demand for services.

Based on the projections shown in Table 10, projected growth in cancer incidence alone will overburden the three units and Methodist will be over full capacity operating at approximately 8,800 procedures per unit. Methodist would not have the capacity to continue outreach efforts to underserved communities and continue to extend high quality cancer services into the secondary markets. Projected regional outreach volumes could add more than 3,000 procedures for Methodist for a projected average number of procedures per unit of more than 9,800 per LINAC which is well above full capacity. Methodist must add capacity to continue its mission.

Finally, Methodist must control the resources required to participate in innovative reimbursement models which will put the system at risk for the full continuum of patient care. Methodist determined a need for an additional LINAC in the east market during the planning for this project. It is important to have the right cancer related services with the appropriate capacity to succeed in managing costs and to develop risk-based models. The truly integrated care delivery model is the foundation for innovative reimbursement and value-based models such as episodes of care, bundled payments and even an oncology medical home. Collaboration with payers is a key as cost controls are increasingly part of the quality conversation in health care. These reimbursement models will be available to private insurers as well as governmental payers, including the State of Tennessee and Medicare, as innovative collaborative delivery models focus on outcomes and quality instead of fee for service health care.

- b. For Linear Accelerators dedicated to performing only SRT, need in a proposed Service Area shall be demonstrated if the average annual number of MRT Procedures performed by existing Linear Accelerators dedicated to performing only SRT procedures in a proposed Service Area exceeds 300, based on a full capacity of 500 procedures.**
Not Applicable
- c. For Linear Accelerators dedicated to performing only SRT/SBRT, need in a proposed Service Area shall be demonstrated if the average annual number of MRT Procedures performed by existing Linear Accelerators dedicated to performing only SRT/SBRT procedures in a proposed Service Area exceeds 510, based on a full capacity of 850 procedures.**
Not Applicable

- d. **Need for a new Proton Beam MRT Unit:** Due to the high cost and extensive service areas that are anticipated to be required for these MRT Units, an applicant proposing a new Proton Beam MRT Unit shall provide information regarding the utilization and service areas of existing or planned Proton Beam MRT Units' utilization and services areas (including those that have received a CON), if they provide MRT services in the proposed Service Area and if that data are available, and the impact its application if granted, would have on those other Proton Beam MRT Units.

Not Applicable

3. **Access to MRT Units.**

- a. **An MRT unit should be located at a site that allows reasonable access for residents of the proposed Service Area.**

The proposed LINAC will supplement the Methodist unit already operating in this eastern part of the service area. The demand for services at the Methodist Radiation Oncology Center exceeds the centers current capacity. As previously noted, the single piece of equipment at this Germantown center operates significantly above the state and national definitions of full capacity – it operates at 150% of full capacity.

More than 90% of the patients currently seeking Methodist LINAC services (including two units at the Methodist University Hospital and one at the Methodist Radiation Oncology Center) originate from the designated service area. The designated service area includes Shelby, Fayette and Tipton counties in Tennessee, DeSoto and Marshall counties in Mississippi and Crittenden County in Arkansas. The unit will be located in a site that is accessible and convenient for patients. See Table 12 below for detailed volumes.

TABLE 12
2012 METHODIST LINAC PROCEDURES BY COUNTY

Service Area	Procedures	% of Total
Shelby, TN	18,549	78%
Desoto, MS	1,352	6%
Tipton, TN	841	4%
Marshall, MS	429	2%
Fayette, TN	371	2%
Crittenden, AR	356	1%
Subtotal	21,898	92%
Out-of-area	1,858	8%
Total	23,756	100%
Source: 2012 TN HSDA - State Equipment Registry		

- b. **An applicant for any proposed new Linear Accelerator should document that the proposed location of the Linear Accelerator is within a 45 minute drive time of the majority of the proposed Service Area's population.**

Methodist West Cancer Center will be located near the corner of Wolf River Boulevard and Germantown Road, which makes it easily accessible for area patients via automobile and ambulance. Germantown Road runs north-south from I-40 to Highway 385 (the new suburban loop in Shelby County that encircles the eastern region of the county). Wolf River Boulevard is less than 1.5 miles south of the Walnut Grove Road and Germantown Road intersection. Both Walnut Grove Road and Germantown Road have their own exits

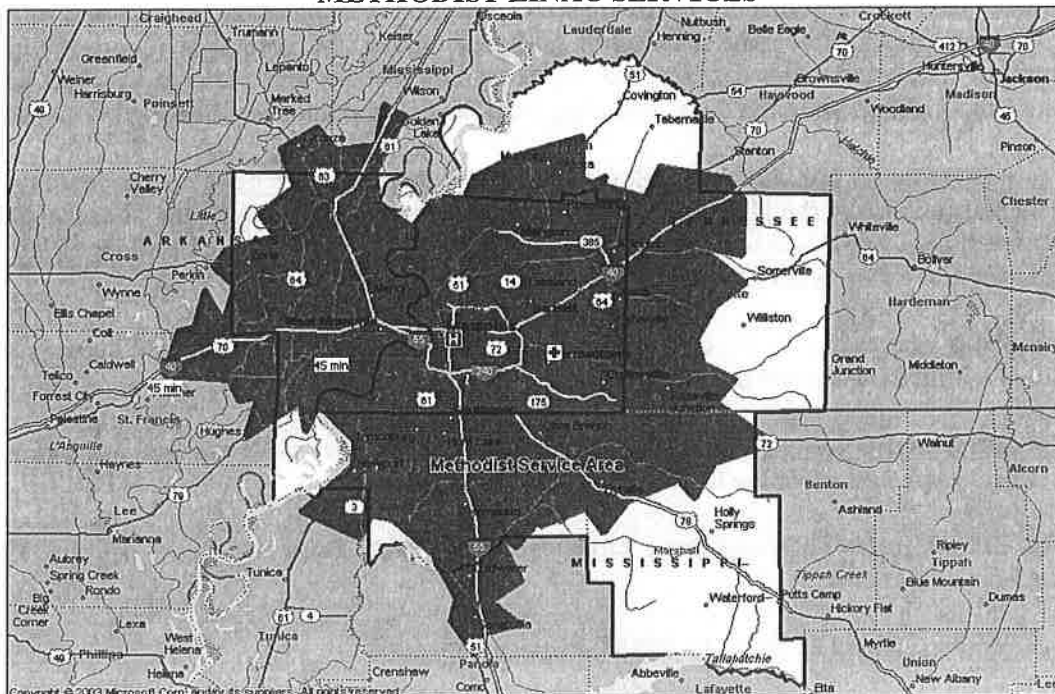
from nearby expressways: Walnut Grove from I-240 and Germantown Road from Highway 385.

The majority (73%) of the population in the Methodist service area is in Shelby County. See Table 13 below for the 2013 population analysis by county. Also, please see the drive time map in Figure 2. The 45-minute drive time radius for the Methodist LINAC services at Methodist University Hospital and the West Cancer Center covers all of Shelby County and the majority of the remaining service area.

TABLE 13
POPULATION BY COUNTY, 2013
METHODIST SERVICE AREA

Service Area	Population	% of Total
Shelby, TN	943,588	73%
DeSoto, MS	167,335	13%
Tipton, TN	61,519	5%
Crittenden, AR	50,052	4%
Fayette, TN	38,617	3%
Marshall, MS	36,340	3%
Total	1,297,451	100%
Source: Truven Healthcare Analytics- Market Expert		

FIGURE 2
DRIVE TIME MAP, 45-MILE RADIUS
METHODIST LINAC SERVICES



- c. Applications that include non-Tennessee counties in their proposed Service Areas should provide evidence of the number of existing MRT units that service the non-Tennessee counties and the impact on MRT unit utilization in the non-Tennessee

counties, including the specific location of those units located in the non-Tennessee counties, their utilization rates, and their capacity (if that data are available).

The only existing MRT unit in the designated service area that is located outside of Tennessee is in DeSoto County, Mississippi. The LINAC unit is performing well above (almost 170%) the minimum threshold of 6,000 procedures per unit. The unit is located at the Baptist Memorial Hospital-DeSoto. See Table 14 for historical volumes.

TABLE 14
NON-TENNESSEE METHODIST SERVICE AREA
LINEAR ACCELERATOR EQUIPMENT AND UTILIZATION, 2010-2012

Facility Type	Facility	2010		2011		2012	
		Procs	# of Units	Procs	# of Units	Procs	# of Units
HOSP	Baptist Memorial Hospital – DeSoto	7,152	1	7,187	1	10,152	1

Source: 2009-2012 MS DOH - State Health Plan

4. **Economic Efficiencies.** All applicants for any proposed new MRT Unit should document that lower costs technology application have been investigated and found less advantageous in terms of accessibility, availability, continuity, cost, and quality of care.

Alternate services and technologies were investigated. However, there was no lower cost alternative that delivers the accuracy and reliability of the selected LINAC. The machine pinpoints the cancerous cells with real-time imaging and allows providers to precisely target tumors while minimizing the amount of healthy cells exposed to radiation. The speed and localization of the real-time imaging offers more patient comfort and less chance the patient will move during the treatments. The equipment is optimized for both radiotherapy and radiosurgery and can treat cancers almost anywhere in the body, including lung, breast, abdomen and head and neck cancers.

5. **Separate Inventories for Linear Accelerators and for other MRT Units.** A separate inventory shall be maintained by the HSDA for Linear Accelerators, for Proton Beam Therapy MRT Units, and if data are available, for Linear Accelerators dedicated to SRT and/or SBRT procedures and other types of MRT Units.

Methodist assures the HSDA that all data requested to maintain the Equipment Registry will be submitted within the expected time frame.

6. **Patient Safety and Quality of Care.** The applicant shall provide evidence that any proposed MRT Unit is safe and effective for its proposed use.
- a. **The United States Food and Drug Administration (FDA) must certify the proposed MRT Unit for clinical use.**

See Attachment B: II (E) for FDA certification

- b. **The applicant should demonstrate that the proposed MRT Units shall be housed in a physical environment that conforms to applicable federal standards, manufacturer's specifications, and licensing agencies' requirements.**

The architect consulted on this project confirms that the physical environment will conform to all applicable federal standards, manufacturer's specifications and licensing agencies' requirements. See Attachment C: Economic Feasibility (1)(d) for the architect letter.

- c. The applicant should demonstrate how emergencies within the MRT Unit facility will be managed in conformity with accepted medical practice.**

There are clinical technicians on the premises trained in basic life support when the patient is being treated. In the event of cardiac or respiratory arrest, trained clinical personnel will initiate basic life support while the patient is being emergently removed from the treatment room. The patient will be assessed and personnel will call 9-1-1 for an ambulance to transport the patient to nearest hospital, Methodist Germantown Hospital. The hospital is approximately 2 miles from the proposed outpatient center.

- d. The applicant should establish protocols that assure that all MRT Procedures performed are medically necessary and will not unnecessarily duplicate other services.**

There are established standard protocols in place for Methodist to ensure all LINAC procedures are medically necessary and will not unnecessarily duplicate other services. All LINAC procedures are required to have a physician's written order that defines the medical necessity. All orders will be reviewed to ensure that there is no unnecessary duplication of services. Methodist has a dedicated team of nurses that precertify all LINAC procedures through the various third party payers. The rigorous precert process ensures medical necessity and assures that the patient does not receive duplicative procedures. See Attachment C: LINAC Services (6)(d) for the System Policy outlining the guidelines for a physician order for all diagnostic services.

- e. An applicant proposing to acquire any MRT Unit shall demonstrate that it meets the staffing and quality assurance requirements of the American Society of Therapeutic Radiation and Oncology (ASTRO), the American College of Radiology (ACR). The American College of Radiation Oncology (ACRO) or a similar accrediting authority such as the National Cancer Institute (CNI). Additionally, all applicants shall commit to obtain accreditation from ASTRO, ACR or a comparable accreditation authority for MRT Services within two years following instigation of the operation of the proposed MRT Unit.**

Methodist meets the staffing and quality assurance requirements. Methodist will obtain accreditation by the American College of Radiology (ACR) for this site of care within the first two years of operation.

- f. All applicants should seek and document emergency transfer agreements with local area hospitals, as appropriate. An applicant's arrangements with its physician medical director must specify that said physician be an active member of the subject transfer agreement hospital medical staff.**

Emergencies will be transferred to Methodist Germantown Hospital. Both the comprehensive cancer center and the hospital will be operated under the same license and provider number, thus there is no need for a formal transfer agreement.

The physician medical director is an active member of the medical staff. See Attachment Section MRI Services 6(f) for current medical director's CV.

- g. All applicants should provide evidence of any onsite simulation and treatment planning services to support the volumes they project and any impact such services may have on volumes and treatment times.**

The CT simulator from the Methodist Radiation Oncology Center will be relocated to this proposed center to support both LINACs. The CT simulator will support projected volumes.

This is the same model that is employed at the Methodist University Hospital – there are two LINACs and a CT simulator. The CT simulator has sufficient capacity to support the volumes and cause no delay in treatment times.

7. **The applicant should provide assurances that it will submit data in a timely fashion as requested by the HSDA to maintain the HSDA Equipment Registry.**

Methodist assures the HSDA that all data requested to maintain the Equipment Registry will be submitted within the expected time frame.

8. **In light of Rule 0720-11.01, which lists the factors concerning need on which an application may be evaluated, and Principle No. 2 in the State Health Plan, “Every citizen should have reasonable access to health care,” the HSDA may decide to give special consideration to an applicant:**

- a. **Who is offering the service in a medically underserved area as designated by the United States Health Resources and Services Administration;**
Not applicable
- b. **Who is a “safety net hospital” or a “children’s hospital” as defined by the Bureau of TennCare Essential Access Hospital payment program; or**
Not applicable
- c. **Who provides a written commitment of intention to contract with at least one TennCare MCO and, if providing adult services, to participate in the Medicare program.**

Methodist is certified for both Medicare and TennCare/Medicaid and participates in both programs. Methodist contracts with all of the TennCare plans offered in the service area and with Medicaid in adjoining States. All hospitals including the hospital-based ambulatory centers treat TennCare participants under the system’s TennCare contracts.

In comparison to other large counties across the State, Shelby County is the home to a disparate number of low-income children seeking coverage from the state’s Medicaid program. Methodist is one of the largest health care providers of TennCare and is committed to these patients as reflected in the projections for this proposal.

- b. **The applicant should demonstrate that the existing physical plant’s condition warrants major renovation or expansion.**

The square footage needed to consolidate the Methodist affiliated cancer care services into a single site of care is slightly larger than available space. Approximately 8,000 square feet will be added to the building for the radiology and radiation therapy departments. Please refer Section B II for more details on renovation and construction.

2. **Describe the relationship of this project to the applicant facility’s long-range development plans, if any.**

This project is consistent with the long-range plan of Methodist Healthcare. The Methodist vision is to be a faith-based health care system that, in partnership with its physicians, will be nationally recognized for delivering outstanding care to each patient, achieved through collaboration with patients and their families. This project is entirely aligned with the system’s vision. The objective of this project is to enhance the care for cancer patients in the Mid-South by decreasing disparities, enhancing access and improving outcomes in a meaningful way.

The resulting action plan will reach this vision through collaboration with the West Clinic physicians, the UTHSC and patients and families to:

- Decrease the fractionization of care to cancer patients;
- Provide access to Multidisciplinary clinics for all cancer care patients;
- Provide cutting edge access to clinical trials and research programs to the community;
- Provide specialized medical, surgical, diagnostic and radiation programs that allow patients to fight on at home in their own community.
- Provide a comprehensive, coordinated and cost effective cancer journey in order to partner with insurance and governmental payers using innovative arrangements that move care from a fee for service methodology to a patient centered quality outcome partnership.

- 3. Identify the proposed service area and justify the reasonableness of that proposed area. Submit a county level map including the State of Tennessee clearly marked to reflect the service area. Please submit the map on 8 1/2" x 11" sheet of white paper marked only with ink detectable by a standard photocopier (i.e., no highlighters, pencils, etc.).**

The project service area includes Shelby, Fayette and Tipton counties in Tennessee, DeSoto and Marshall counties in Mississippi and Crittenden County in Arkansas. See Attachment Section C: Need (3) for a county level service area map. This service area is deemed reasonable for the West Cancer Center's regional oncology services.

4. A. Describe the demographics of the population to be served by this proposal.

**TABLE 15
DEMOGRAPHICS SUMMARY, 2013- 2023
METHODIST 6-COUNTY SERVICE AREA**

	Selected Area	USA		2013	2018	% Change
2010 Total Population	1,275,587	308,745,538	Total Male Population	623,428	642,660	3.1%
2013 Total Population	1,296,691	314,861,807	Total Female Population	673,263	690,532	2.6%
2018 Total Population	1,333,192	325,322,277	Females, Child Bearing Age	271,907	269,075	-1.0%
% Change 2013 - 2018	2.6%	3.3%				
Average Household Income	\$63,414	\$69,637				

POPULATION DISTRIBUTION						HOUSEHOLD INCOME DISTRIBUTION			
Age Distribution						Income Distribution			
Age Group	2013	% of Total	2018	% of Total	USA 2013 % of Total	2013 Household Income	HH Count	% of Total	USA % of Total
0-14	278,109	21.4%	280,999	21.1%	19.6%	<\$15K	76,564	15.8%	13.8%
15-17	59,583	4.6%	57,373	4.3%	4.1%	\$15-25K	57,304	11.8%	11.6%
18-24	128,967	9.9%	130,918	9.8%	10.0%	\$25-50K	130,020	26.8%	25.3%
25-34	173,085	13.3%	174,648	13.1%	13.1%	\$50-75K	87,287	18.0%	18.1%
35-54	352,375	27.2%	342,140	25.7%	26.9%	\$75-100K	53,969	11.1%	11.7%
55-64	155,239	12.0%	167,244	12.5%	12.4%	Over \$100K	79,984	16.5%	19.5%
65+	149,333	11.5%	179,870	13.5%	13.9%				
Total	1,296,691	100.0%	1,333,192	100.0%	100.0%	Total	485,128	100.0%	100.0%

EDUCATION LEVEL				RACE/ETHNICITY			
Education Level Distribution				Race/Ethnicity Distribution			
2013 Adult Education Level	Pop Age 25+	% of Total	USA % of Total	Race/Ethnicity	2013 Pop	% of Total	USA % of Total
Less than High School	40,360	4.9%	6.2%	White Non-Hispanic	573,514	44.2%	62.3%
Some High School	80,340	9.7%	8.4%	Black Non-Hispanic	601,959	46.4%	12.3%
High School Degree	245,783	29.6%	28.4%	Hispanic	74,431	5.7%	17.3%
Some College/Assoc. Degree	255,727	30.8%	28.9%	Asian & Pacific Is. Non-Hispanic	26,853	2.1%	5.1%
Bachelor's Degree or Greater	207,822	25.0%	28.1%	All Others	19,934	1.5%	2.9%
Total	830,032	100.0%	100.0%	Total	1,296,691	100.0%	100.0%

B. Describe the special needs of the service area population, including health disparities, the accessibility to consumers, particularly the elderly, women, racial and ethnic minorities, and low-income groups. Document how the business plans of the facility will take into consideration the special needs of the service area population.

The special needs of the service area population significantly contribute to the projected volumes and planning for the project. The business plan takes into consideration the aging of the population, the large number/disparate mix of TennCare enrollees, the disparities in care based on race, the predominance of poor lifestyle choices and disregard of preventive screenings throughout the service area population.

One of the most notable demographic changes in the service area over the last ten years has been the aging of the population and it is projected these trends will continue. Over the next ten years it is particularly significant that the area population aged 65 years and older - the group that most needs health and cancer care - accounts for 85% of the total population growth. The number of people 65 and older will increase by more than 67,500 persons, or 45%, which is almost double the entire population

of Fayette County. The older age cohorts already account for 60% of the health care expenditures. People in age cohorts 65 and older account for two-thirds of all cancer diagnoses and 70% of cancer deaths. The plans to develop a more comprehensive and seamless continuum of cancer care is required to plan for the health care needs and chronic illnesses of the older population.

Shelby County claims the largest population of all 95 Tennessee counties with over 900,000 residents; with that Shelby County also has the largest TennCare population. In comparison to other large counties across the state, Shelby County is the home to a disparate number of low-income or disabled Tennesseans seeking coverage from the state's Medicaid program. Methodist is one of the largest health care providers of TennCare and is committed to these patients as reflected in the projections for this proposal.

Additionally, the projected racial mix of the population is 44% white, 46% black and 10% other races. Addressing racial disparities in cancer care is paramount in Shelby County and the surrounding communities. Disparities in cancer care result from gaps along the entire continuum of care; however, due to multiple organizations and disparate data sources evaluating the entire continuum for a large population is rarely achieved. In January 2013, Methodist Healthcare Foundation was awarded a planning grant from Avon Foundation to establish a clinical data warehouse to enable the evaluation of women with breast cancer from pre-screening through treatment. The next phase of the research includes elucidating the differences in care pathways between races and evaluating the effectiveness of patient navigation in order to reduce/eliminate disparities in care of breast cancer in our community. The integration of the disparate sites of cancer is a crucial step in Methodist's research efforts.

Cancer is an important public health concern, and incidence rates are dramatically rising nationally and locally. Poor lifestyle choices and disregard of preventive screenings are contributing factors to the increase of cancer rates. The population identified by the project's service area is plagued by a predominance of health risk factors.

- Tobacco use is the number one preventable cause of death in the United States, and Tennessee has one of the highest incidence rates of lung cancer cases with rates of residents currently smoking higher than National norms.
- Tennessee is one of the most overweight/obese states in the country. A recent report entitled "F as in Fat: How Obesity Threatens America's Future 2010" rates Tennessee as the 2nd highest state in the country in obesity. The trend will continue with the growing numbers of people who do not get regular physical activity.
- Screening rates for breast and colorectal cancers also fall below national averages for this service area; Mississippi and Arkansas have fewer women seeking preventive mammograms, and Tennessee, Mississippi, and Arkansas have fewer seeking sigmoidoscopies and colonoscopies than the rest of nation.

There is only one dominant strategy for cancer care providers to consider. It is the development of a collaborative integrated multidisciplinary cancer program. Cancer providers that clearly and efficiently develop and operationalize this approach will create higher standards of care, complex treatment options, better research opportunities and access to multi-phase clinical trials. This type of care program will increase patient's knowledge and care expectations by experiencing a system designed to reduce or eliminate disparate experiences of care.

5. **Describe the existing or certified services, including approved but unimplemented CONs, of similar institutions in the service area. Include utilization and/or occupancy trends for each of the most recent three years of data available for this type of project. Be certain to list each institution and its utilization and/or occupancy individually. Inpatient bed projects must include the following data:**

admissions or discharges, patient days, and occupancy. Other projects should use the most appropriate measures, e.g., cases, procedures, visits, admissions, etc.

The LINAC utilization for existing services is reported under the LINAC criteria, yet it is repeated on the following pages for convenience.

**COPY OF TABLE 11
METHODIST SERVICE AREA
LINEAR ACCELERATOR EQUIPMENT AND UTILIZATION, 2010-2012**

Facility Type	Facility	2010		2011		2012	
		Procs	# of Units	Procs	# of Units	Procs	# of Units
HOSP	Methodist Healthcare	21,287	3	21,049	3	23,756	3
HOSP	Baptist Memorial Hospital-Memphis	10,989	3	11,343	3	11,052	2
ASTC	Baptist Memorial Hospital-Tipton/Germantown	7,365	1	5,270	1	7,610	1
HOSP	Regional Medical Center at Memphis (The Med) ¹	87	1	-	-	-	-
HOSP	St. Francis Hospital – Park	7,508	2	7,576	2	6,795	2
HOSP	St. Jude Children’s Research Hospital	5,789	2	4,800	2	1,437	2
HOSP	Baptist Memorial Hospital – DeSoto	7,152	1	7,187	1	10,152	1
Total Procedures		60,177	13	57,225	12	80,802	11
Average Procedures per Unit		4,629		4,769		5,527	
Total Procedures without St. Jude		53,388	11	52,425	10	59,365	9
Average Procedures per Unit without St. Jude		4,944		5,243		6,596	
Source: 2008-10 TN HSDA - State Equipment Registry; and 2009-2012 MS DOH - State Health Plan							
¹ The Regional Medical Center at Memphis closed Linear Accelerator Services in 2010							

There are approved, yet unimplemented CONs of similar institutions in the service area. Baptist Memorial – Tipton Hospital filed CONs (CN1211-057 and CN1105-018) to create a cancer center close to the Memphis hospital campus. These applications support Methodist’s findings that consolidation of cancer services will lead to efficiencies and improvements across the full continuum of care.

6. Provide applicable utilization and/or occupancy statistics for your institution for each of the past three (3) years and the projected annual utilization for each of the two (2) years following completion of the project. Additionally, provide the details regarding the methodology used to project utilization. The methodology must include detailed calculations or documentation from referral sources, and identification of all assumptions.

As previously described, the growth rate for cancer incidence in the Methodist service area is calculated based on national cancer incidence rates and is applied against local population projections which factor in the aging population and overall growth. Cancer cases in the Methodist service area will grow by approximately 2.5% annually between 2013 and 2018 (or 12% over five year). See Table 16 for the

calculation of local cancer incidence repeated below for convenience showing a five-year projected growth rate of 12%. See Table 17 for historical and projected utilization.

TABLE 16
PROJECTION OF LOCAL CANCER INCIDENCE, 2013 BASE YEAR AND 2016-2018
METHODIST HEALTHCARE SERVICE AREA

		Year 1	Year 2	
Projection of Local Cancer Incidence	2013	2016	2017	2018
Projected Market Procedures				
Under 65	1,147,941	1,151,431	1,152,597	1,153,764
65 and Over	149,510	167,171	173,510	180,090
Total	1,297,451	1,318,603	1,326,108	1,333,854
National Cancer Incidence Rates per 100,000				
Under 65	224.2	224.2	224.2	224.2
65 and Over	2,113.7	2,113.7	2,113.7	2,113.7
Projected Service Area Cancer Incidence				
Under 65	2,574	2,582	2,584	2,587
65 and Over	3,160	3,534	3,667	3,807
Total	5,734	6,115	6,252	6,393
% Growth over 2013 Incidence Rates		107%	109%	112%
Projected LINAC Procedures in Market Based on Population Aging/Growth				
Cumulative Incremental Procedures in Market	-	3,946	5,360	6,827

TABLE 17
HISTORICAL AND PROJECTED UTILIZATION
METHODIST HEALTHCARE-MEMPHIS HOSPITAL

	2010	2011	2012	Year 1	Year 2
Procedures	21,287	21,049	23,756	26,822	28,165

ECONOMIC FEASIBILITY

1. Provide the cost of the project by completing the Project Costs Chart on the following page. Justify the cost of the project.

- All projects should have a project cost of at least \$3,000 on Line F. (Minimum CON Filing Fee). CON filing fee should be calculated from Line D. (See Application Instructions for Filing Fee)

The CON filing fee calculated from Line D of the Project Costs Chart was \$45,000; therefore a check for this amount accompanies the application.

- The cost of any lease (building, land, and/or equipment) should be based on fair market value or the total amount of the lease payments over the initial term of the lease, whichever is greater. Note: This applies to all equipment leases including by procedure or "per click" arrangements. The methodology used to determine the total lease cost for a "per click" arrangement must include, at a minimum, the project procedures, the "per click" rate and the term of the lease.

The first five years of lease payments plus maintenance and relocation expenses for the hospital-based CTs and PET located at the West Clinic were compared to fair market values. Project costs included the greater of the two.

- The cost for fixed and moveable equipment includes, but is not necessarily limited to, maintenance agreements covering the expected useful life of the equipment; federal, state, and local taxes and other government assessments; and installation charges, excluding capital expenditures for physical plant renovation or in-wall shielding, which should be included under construction costs or incorporated in a facility lease.

See Attachment C: Economic Feasibility (1)(c) for the list of moveable equipment over \$50,000.

- For projects that include new construction, modification, and/or renovation; documentation must be provided from a contractor and/or architect that support the estimated construction costs

A letter from the architect follows as Attachment C: Economic Feasibility (1)(d).

PROJECT COSTS CHART

A. Construction and equipment acquired by purchase:

1.	Architectural and Engineering Fees	\$1,465,054
2.	Legal, Administrative (Excluding CON Filing Fee), Consultant Fees	10,000
3.	Acquisition of Site	22,500,000
4.	Preparation of Site	
5.	Construction Costs	16,152,175
6.	Contingency Fund	1,615,218
7.	Fixed Equipment (Not included in Construction Contract)	
8.	Moveable Equipment (List all equipment over \$50,000 – attached)	13,515,708
9.	Other (Specify) IT Communications	710,000

B. Acquisition by gift, donation, or lease:

1.	Facility (inclusive of building and land)	
2.	Building only	
3.	Land only	
4.	Equipment (Specify) See equipment list attached	4,541,038
5.	Other (Specify)	

C. Financing Costs and Fees:

1.	Interim Financing	
2.	Underwriting Costs	
3.	Reserve for One Year's Debt Service	
4.	Other (Specify)	

D. Estimated Project Cost
(A+B+C)

60,509,193

E. CON Filing Fee

45,000

F. Total Estimated Project Cost
(D+E)

TOTAL

60,554,193

MOVEABLE EQUIPMENT LIST > \$50,000

ITEM DESCRIPTION	TOTAL
LINAC	\$1,916,102
MRI 1.5T	\$1,838,810
High Does Rate Unit	\$220,000
Anesthesia Machine	\$120,000
Sterilizer	\$100,000
Washer	\$100,000
Operating Room Lights	\$95,000
Operating Room Table	\$55,000

Equipment Cost - Leased Costs versus FMV

	Lease	Replacement FMV
PET/CT		
Annual Lease and Maintenance	\$ 2,191,901	
Replacement Cost and Maintenance		\$ 1,824,113
Subtotal	\$ 2,191,901	\$ 1,824,113
CT - 2 Somatom Definition AS CTs		
Annual Lease and Maintenance	\$2,349,137	
Replacement Cost and Maintenance		\$ 1,820,156
Subtotal	\$ 2,349,137	\$ 1,820,156
Leased Equipment/Maintenance (Project Costs B.4.)	\$ 4,541,038	\$ 3,644,269

2. Identify the funding sources for this project.

Please check the applicable item(s) below and briefly summarize how the project will be financed. (Documentation for the type of funding **MUST** be inserted at the end of the application, in the correct alpha/numeric order and identified as Attachment C, Economic Feasibility-2.)

	A. Commercial loan—Letter from lending institution or guarantor stating favorable initial contact, proposed loan amount, expected interest rates, anticipated term of the loan, and any restrictions or conditions;
	B. Tax-exempt bonds—Copy of preliminary resolution or a letter from the issuing authority stating favorable initial contact and a conditional agreement from an underwriter or investment banker to proceed with the issuance;
	C. General obligation bonds—Copy of resolution from issuing authority or minutes from the appropriate meeting.
	D. Grants--Notification of intent form for grant application or notice of grant award; or
X	E. Cash Reserves--Appropriate documentation from Chief Financial Officer.
	F. Other—Identify and document funding from all other sources.
	Methodist Healthcare is prepared to fund the project cost with cash reserves. See the attached letter from the Chief Financial Officer. Attachment C: Economic Feasibility (2)

3. Discuss and document the reasonableness of the proposed project costs. If applicable, compare the cost per square foot of construction to similar projects recently approved by the Health Services and Development Agency.
4. The costs of the project are reasonable and comparable to similar CON projects approved throughout the service area over the last few years. This project has an estimated cost per square foot of approximately \$145 per square foot (\$16,152,175 / 111,485 sf) or \$159 (\$17,767,393 / 111,485 sf) with construction contingency. See the cost per square foot comparison in Table 1 below.

COPY TABLE 1

COST PER SQUARE FOOT COMPARISON WITH APPROVED PROJECTS

CON Name	Date Filed	Cost per Square Foot
Methodist University PET Renovation & Relocation	Nov-11	\$ 244
Campbell Clinic Surgery Center Construction & Renovation	Aug-12	\$ 244
The Regional Medical Center – The Med Hospital Construction & Renovation	Aug-12	\$ 225
Baptist Memorial Women's Hospital ED Construction & Renovation	Dec-12	\$ 238
Baptist Memorial Tipton Hospital Establish Cancer Center (Relocation)	Dec-12	\$ 250

4. **Complete Historical and Projected Data Charts on the following two pages--Do not modify the Charts provided or submit Chart substitutions!** Historical Data Chart represents revenue and expense information for the last *three (3)* years for which complete data is available for the institution. Projected Data Chart requests information for the two (2) years following the completion of this proposal. Projected Data Chart should reflect revenue and expense projections for the *Proposal Only* (*i.e.*, if the application is for additional beds, include anticipated revenue from the proposed beds only, not from all beds in the facility).

Following this page are the Historic Data Chart for Methodist Healthcare-Memphis Hospitals, and a Projected Data Chart for Methodist Healthcare-Memphis Hospitals. See Attachment C: Economic Feasibility (4) for items included in the Other Expense and Revenue amounts.

5. **Please identify the project's average gross charge, average deduction from operating revenue, and average net charge.**

The average gross charge and deduction amounts below are calculated using adjusted discharges.

Average Gross Charge	\$	48,733
Average Deduction		37,348
Average Net Charge	\$	12,385

HISTORICAL DATA CHART

Methodist Healthcare-Memphis Hospitals

Give information for the last *three (3)* years for which complete data are available for the facility or agency. The fiscal year begins in January (Month).

	Year <u>2010</u>	Year <u>2011</u>	Year <u>2012</u>
A. Utilization Data (Patient Days)	<u>343,664</u>	<u>354,115</u>	<u>350,565</u>
B. Revenue from Services to Patients	(in thousands)		
1. Inpatient Services	\$ <u>2,356,295</u>	\$ <u>2,473,036</u>	\$ <u>2,547,551</u>
2. Outpatient Services	<u>1,268,029</u>	<u>1,409,960</u>	<u>2,028,543</u>
3. Emergency Services	<u>206,355</u>	<u>242,879</u>	<u>285,982</u>
4. Other Operating Revenue	<u>16,542</u>	<u>16,716</u>	<u>29,498</u>
(Specify) <u>see attached</u>			
Gross Operating Revenue	\$ <u>3,847,221</u>	\$ <u>4,142,591</u>	\$ <u>4,891,574</u>
C. Deductions from Gross Operating Revenue			
1. Contractual Adjustments	\$ <u>2,354,936</u>	\$ <u>2,531,442</u>	\$ <u>3,052,543</u>
2. Provision for Charity Care	<u>291,148</u>	<u>319,941</u>	<u>338,430</u>
3. Provisions for Bad Debt	<u>94,541</u>	<u>112,949</u>	<u>142,763</u>
Total Deductions	\$ <u>2,740,625</u>	\$ <u>2,964,332</u>	\$ <u>3,533,736</u>
NET OPERATING REVENUE	\$ <u>1,106,596</u>	\$ <u>1,178,259</u>	\$ <u>1,357,838</u>
D. Operating Expenses			
1. Salaries and Wages	\$ <u>387,179</u>	\$ <u>406,073</u>	\$ <u>433,147</u>
2. Physician's Salaries and Wages	<u>6,016</u>	<u>3,224</u>	<u>4,073</u>
3. Supplies	<u>225,698</u>	<u>233,548</u>	<u>301,936</u>
4. Taxes	<u>1,116</u>	<u>1,392</u>	<u>1,762</u>
5. Depreciation	<u>53,892</u>	<u>70,172</u>	<u>72,894</u>
6. Rent	<u>2,271</u>	<u>2,462</u>	<u>7,098</u>
7. Interest, other than Capital	<u>-</u>		
8. Management Fees: a) Fees to Affiliates	<u>1,482</u>	<u>1,072</u>	<u>4,268</u>
b) Fees to Non-Affiliates	<u>3,068</u>	<u>2,768</u>	<u>2,584</u>
9. Other Expenses <u>see attached</u>	<u>362,941</u>	<u>381,551</u>	<u>451,042</u>
Total Operating Expenses	\$ <u>1,043,663</u>	\$ <u>1,102,262</u>	\$ <u>1,278,804</u>
E. Other Revenue (Expenses) – Net <u>see attached</u>	\$ <u>46,696</u>	\$ <u>33,080</u>	\$ <u>33,243</u>
NET OPERATING INCOME (LOSS)	\$ <u>109,629</u>	\$ <u>109,077</u>	\$ <u>112,277</u>
F. Capital Expenditures			
1. Retirement of Principal	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>
2. Interest	<u>12,792</u>	<u>24,440</u>	<u>24,053</u>
Total Capital Expenditures	\$ <u>12,792</u>	\$ <u>24,440</u>	\$ <u>24,053</u>
NET OPERATING INCOME (LOSS)			
LESS CAPITAL EXPENDITURES	\$ <u>96,837</u>	\$ <u>84,637</u>	\$ <u>88,224</u>

**Projected Data Chart
West Cancer Cetner LINAC Project Only**

Give information for the (2) years following the completion of this proposal.

The fiscal year begins in January.

	Year 1 2016	Year 2 2017
A. Utilization Data (specific unit of measure)		
Procedures	14,221	15,430
B. Revenue from Services to Patients		
1. Inpatient Services		
2. Outpatient Services	\$ 55,270,727	\$ 56,240,729
3. Emergency Services		
4. Other Operating Revenue (Specify) <u>see attached</u>	\$ 2,690	\$ 2,717
Gross Operating Revenue	\$ 55,273,417	\$ 56,243,445
C. Deductions for Operating Revenue		
1. Contractual Adjustments	\$ 39,381,823	\$ 40,109,887
2. Provision for Charity Care	\$ 1,031,399	\$ 1,031,118
3. Provisions for Bad Debt	\$ 1,039,825	\$ 1,039,542
Total Deductions	\$ 41,453,046	\$ 42,180,547
Net Operating Revenue	\$ 13,820,371	\$ 14,062,898
D. Operating Expenses		
1. Salaries and Wages	\$ 1,753,890	\$ 1,797,744
2. Physician's Salaries and Wages	\$ 18,484	\$ 18,939
3. Supplies	\$ 150,398	\$ 153,406
4. Taxes	\$ 4,701	\$ 4,747
5. Depreciation	\$ -	\$ -
6. Rent	\$ 95,947	\$ 96,360
7. Interest, other than capital	\$ -	\$ -
8. Management Fees:		
a. Fees to Affiliates	\$ 35,530	\$ 35,177
b. Fees to Non-Affiliates	\$ 82,904	\$ 82,079
9. Other Expenses (Specify) <u>see attached</u>	\$ 4,087,926	\$ 4,153,153
Total Operating Expenses	\$ 6,229,780	\$ 6,341,606
E. Other Revenue (Expenses) -- Net (Specify)	\$ -	\$ -
NET OPERATING INCOME (LOSS)	\$ 7,590,592	\$ 7,721,292
F. Capital Expenditures		
1. Retirement of Principal		
2. Interest	\$ -	\$ -
Total Capital Expenditures	\$ -	\$ -
NET OPERATING INCOME (LOSS)		
LESS CAPITAL EXPENDITURES	\$ 7,590,592	\$ 7,721,292

**Projected Data Chart- Other Operating Revenue
West Cancer Center LINAC Project Only**

		Year 1 2016	Year 2 2017
1.	Cafeteria	\$ 0	\$ 0
2.	Drugs	\$ 414	\$ 420
3.	Gift Shop	\$ 16	\$ 16
4.	Telephone	\$ 2	\$ 2
5.	Vending	\$ 19	\$ 20
6.	Shared Svc	\$ 17	\$ 17
7.	Tuition/Student Fees	\$ 19	\$ 19
8.	Office Rentals	\$ 285	\$ 286
9.	Parking	\$ -	\$ -
10.	340b Program	\$ 520	\$ 518
11.	HealthSouth	\$ 65	\$ 65
12.	Trauma Fund	\$ 31	\$ 31
13.	Rental Income	\$ 14	\$ 14
14.	Transp (ground & fixed wing)	\$ 66	\$ 66
15.	Gamma Knife	\$ 5	\$ 5
16.	Grants	\$ 41	\$ 42
17.	Other	\$ 1,176	\$ 1,198
Total Other Operating Revenue		\$ 2,690	\$ 2,717

**Projected Data Chart- Other Expenses
West Cancer Center LINAC Project Only**

		Year 1 2016	Year 2 2017
1.	Benefits	\$ 979,165	\$ 999,830
2.	Repairs	\$ 196,462	\$ 198,817
3.	Professional Fees	\$ 455,435	\$ 460,076
4.	Contract Service	\$ 592,447	\$ 598,862
5.	Auditing Fees	\$ 2,067	\$ 2,091
6.	Consulting Fees	\$ 16,902	\$ 17,104
7.	Legal Fees	\$ 1,340	\$ 1,356
8.	Other-Accounting & Legal	\$ 785	\$ 794
9.	Advertising	\$ 4,481	\$ 4,535
10.	Dues	\$ 10,979	\$ 11,111
11.	Travel	\$ 11,837	\$ 11,979
12.	Utilities	\$ 134,109	\$ 135,717
13.	Insurance	\$ 151,830	\$ 153,649
14.	Transfers Reagents	\$ (673)	\$ (681)
15.	Transfers Laundry	\$ 34,096	\$ 34,305
16.	Transfer Print Shop	\$ 6,857	\$ 6,940
17.	Transfer Telephone	\$ 9,079	\$ 9,187
18.	Transfers Transcription	\$ 37,789	\$ 38,269
19.	Trans Cost Maint	\$ 4,147	\$ 4,196
20.	Trans Cost Univ/Other Fac	\$ (176)	\$ (178)
21.	Other Transfers	\$ (491)	\$ (497)
22.	Books	\$ 1,351	\$ 1,367
23.	Other Bus Events	\$ 2,313	\$ 2,341
24.	Assoc Recruitment	\$ 2,539	\$ 2,570
25.	Phys Recruitment	\$ 33,151	\$ 32,588
26.	Credit Card Fees	\$ 4,699	\$ 4,755
27.	Bank Svc Charges	\$ 1,229	\$ 1,244
28.	Contributions	\$ 2,965	\$ 3,000
29.	UT Payments Oncol	\$ 126,127	\$ 126,194
30.	DP Software	\$ 2,145	\$ 2,171
31.	License and Accred Fees	\$ 5,891	\$ 5,858
32.	Postage	\$ 1,595	\$ 1,615
33.	Freight	\$ 14,896	\$ 15,075
34.	Telephone incl network cable	\$ 12,414	\$ 12,563
35.	Procurement Card	\$ 3,142	\$ 3,179
36.	Purchase Discounts	\$ (430)	\$ (435)
37.	Hosp Funding	\$ 5,012	\$ 4,973
38.	Other	\$ 2,282	\$ 2,309
39.	Mionority Interest	\$ 11,922	\$ 12,253
40.	Corporate Allocation	\$ 1,027,824	\$ 1,049,210
41.	Physician Margin Allocation	\$ 178,390	\$ 182,863
Total Other Expenses		\$ 4,087,925	\$ 4,153,154

**Projected Data Chart
West Cancer Center Project Only**

Give information for the (2) years following the completion of this proposal.

The fiscal year begins in January.

	Year 1 2016	Year 2 2017
A. Utilization Data (specific unit of measure)		
Patient Visits	132,888	136,471
B. Revenue from Services to Patients		
1. Inpatient Services		
2. Outpatient Services	\$ 461,094,696	\$ 469,186,909
3. Emergency Services		
4. Other Operating Revenue (Specify) <u>see attached</u>	\$ 2,679,479	\$ 2,706,274
Gross Operating Revenue	\$ 463,774,175	\$ 471,893,183
C. Deductions for Operating Revenue		
1. Contractual Adjustments	\$ 328,541,894	\$ 334,615,753
2. Provision for Charity Care	\$ 8,604,418	\$ 8,602,076
3. Provisions for Bad Debt	\$ 8,674,712	\$ 8,672,351
Total Deductions	\$ 345,821,023	\$ 351,890,181
Net Operating Revenue	\$ 117,953,152	\$ 120,003,002
D. Operating Expenses		
1. Salaries and Wages	\$ 16,174,425	\$ 16,578,847
2. Physician's Salaries and Wages	\$ 170,456	\$ 174,656
3. Supplies	\$ 35,112,408	\$ 35,814,656
4. Taxes	\$ 84,245	\$ 85,012
5. Depreciation	\$ 3,970,000	\$ 3,970,000
6. Rent	\$ 1,719,491	\$ 1,725,611
7. Interest, other than capital	\$ -	\$ -
8. Management Fees:		
a. Fees to Affiliates	\$ 636,753	\$ 629,946
b. Fees to Non-Affiliates	\$ 1,485,758	\$ 1,469,873
9. Other Expenses (Specify) <u>see attached</u>	\$ 53,015,486	\$ 54,259,701
Total Operating Expenses	\$ 112,369,022	\$ 114,708,302
E. Other Revenue (Expenses) -- Net (Specify)	\$ -	\$ -
NET OPERATING INCOME (LOSS)	\$ 5,584,130	\$ 5,294,700
F. Capital Expenditures		
1. Retirement of Principal		
2. Interest	\$ -	\$ -
Total Capital Expenditures	\$ -	\$ -
NET OPERATING INCOME (LOSS)		
LESS CAPITAL EXPENDITURES	\$ 5,584,130	\$ 5,294,700

**Projected Data Chart- Other Operating Revenue
West Cancer Center Project Only**

		Year 1 2016	Year 2 2017
1.	Cafeteria	\$ 209	\$ 207
2.	Drugs	\$ 412,878	\$ 417,974
3.	Gift Shop	\$ 16,248	\$ 16,273
4.	Telephone	\$ 1,764	\$ 1,756
5.	Vending	\$ 19,338	\$ 19,498
6.	Shared Svc	\$ 16,531	\$ 16,772
7.	Tuition/Student Fees	\$ 18,553	\$ 18,695
8.	Office Rentals	\$ 283,727	\$ 285,279
9.	Parking	\$ -	\$ -
10.	340b Program	\$ 517,954	\$ 515,631
11.	HealthSouth	\$ 64,500	\$ 64,341
12.	Trauma Fund	\$ 30,938	\$ 30,799
13.	Rental Income	\$ 13,763	\$ 13,838
14.	Transp (ground & fixed wing)	\$ 65,742	\$ 66,102
15.	Gamma Knife	\$ 4,586	\$ 4,565
16.	Grants	\$ 41,127	\$ 41,343
17.	Other	\$ 1,171,623	\$ 1,193,203
Total Other Operating Revenue		\$ 2,679,479	\$ 2,706,274

**Projected Data Chart- Other Expenses
West Cancer Center Project Only**

		Year 1 2016	Year 2 2017
1.	Benefits	\$ 12,698,594	\$ 13,062,473
2.	Repairs	\$ 2,547,877	\$ 2,597,480
3.	Professional Fees	\$ 5,906,448	\$ 6,010,748
4.	Contract Service	\$ 7,683,328	\$ 7,823,950
5.	Auditing Fees	\$ 26,802	\$ 27,324
6.	Consulting Fees	\$ 219,198	\$ 223,465
7.	Legal Fees	\$ 17,379	\$ 17,718
8.	Other-Accounting & Legal	\$ 10,179	\$ 10,377
9.	Advertising	\$ 58,119	\$ 59,250
10.	Dues	\$ 142,388	\$ 145,160
11.	Travel	\$ 153,510	\$ 156,499
12.	Utilities	\$ 1,739,236	\$ 1,773,095
13.	Insurance	\$ 1,969,049	\$ 2,007,383
14.	Transfers Reagents	\$ (8,725)	\$ (8,894)
15.	Transfers Laundry	\$ 442,185	\$ 448,179
16.	Transfer Print Shop	\$ 88,933	\$ 90,665
17.	Transfer Telephone	\$ 117,739	\$ 120,031
18.	Transfers Transcription	\$ 490,073	\$ 499,976
19.	Trans Cost Maint	\$ 53,778	\$ 54,825
20.	Trans Cost Univ/Other Fac	\$ (2,287)	\$ (2,331)
21.	Other Transfers	\$ (6,372)	\$ (6,496)
22.	Books	\$ 17,523	\$ 17,864
23.	Other Bus Events	\$ 29,999	\$ 30,583
24.	Assoc Recruitment	\$ 32,933	\$ 33,575
25.	Phys Recruitment	\$ 429,925	\$ 425,756
26.	Credit Card Fees	\$ 60,937	\$ 62,123
27.	Bank Svc Charges	\$ 15,943	\$ 16,253
28.	Contributions	\$ 38,448	\$ 39,196
29.	UT Payments Oncol	\$ 1,635,714	\$ 1,648,687
30.	DP Software	\$ 27,818	\$ 28,360
31.	License and Accred Fees	\$ 76,396	\$ 76,527
32.	Postage	\$ 20,691	\$ 21,094
33.	Freight	\$ 193,187	\$ 196,948
34.	Telephone incl network cable	\$ 160,998	\$ 164,132
35.	Procurement Card	\$ 40,744	\$ 41,537
36.	Purchase Discounts	\$ (5,575)	\$ (5,684)
37.	Hosp Funding	\$ 65,003	\$ 64,969
38.	Other	\$ 29,592	\$ 30,166
39.	Minority Interest	\$ 154,616	\$ 160,085
40.	Corporate Allocation	\$ 13,329,651	\$ 13,707,608
41.	Physician Margin Allocation	\$ 2,313,511	\$ 2,389,045
Total Other Expenses		\$ 53,015,486	\$ 54,259,701

PROJECTED DATA CHART

Methodist Healthcare—Memphis Hospitals

Give information for the two (2) years following the completion of this proposal. The fiscal year begins in January (Month).

	Year	2016	Year	2017
A. Utilization Data (Patient days)		<u>316,060</u>		<u>314,206</u>
B. Revenue from Services to Patients		(in thousands)		
1. Inpatient Services	\$	<u>2,922,755</u>	\$	<u>3,064,409</u>
2. Outpatient Services		<u>2,817,482</u>		<u>2,965,668</u>
3. Emergency Services				
4. Other Operating Revenue		<u>51,382</u>		<u>52,129</u>
		<i>see attached</i>		
Gross Operating Revenue	\$	<u>5,791,619</u>	\$	<u>6,082,206</u>
C. Deductions from Gross Operating Revenue				
1. Contractual Adjustments	\$	<u>3,948,421</u>	\$	<u>4,207,669</u>
2. Provision for Charity Care		<u>225,886</u>		<u>220,249</u>
3. Provisions for Bad Debt		<u>175,040</u>		<u>179,488</u>
Total Deductions	\$	<u>4,349,347</u>	\$	<u>4,607,406</u>
NET OPERATING REVENUE	\$	<u>1,442,272</u>	\$	<u>1,474,800</u>
D. Operating Expenses				
1. Salaries and Wages	\$	<u>458,842</u>	\$	<u>469,072</u>
2. Physician's Salaries and Wages		<u>4,167</u>		<u>4,260</u>
3. Supplies		<u>313,044</u>		<u>322,364</u>
4. Taxes		<u>1,981</u>		<u>2,025</u>
5. Depreciation		<u>87,268</u>		<u>88,862</u>
6. Rent		<u>6,278</u>		<u>6,370</u>
7. Interest, other than Capital		<u>-</u>		<u>-</u>
8. Management Fees:				
a) Fees to Affiliates		<u>2,140</u>		<u>2,164</u>
b) Fees to Non-Affiliates		<u>4,994</u>		<u>5,051</u>
8. Other Expenses		<u>521,977</u>		<u>534,506</u>
		<i>see attached</i>		
Total Operating Expenses	\$	<u>1,400,692</u>	\$	<u>1,434,674</u>
E. Other Revenue (Expenses) -- Net (Specify)	\$	<u>42,994</u>	\$	<u>46,563</u>
NET OPERATING INCOME (LOSS)	\$	<u>84,574</u>	\$	<u>86,689</u>
F. Capital Expenditures				
1. Retirement of Principal				
2. Interest		<u>25,238</u>		<u>24,488</u>
Total Capital Expenditures	\$	<u>25,238</u>	\$	<u>24,488</u>
NET OPERATING INCOME (LOSS)				
LESS CAPITAL EXPENDITURES	\$	<u>59,336</u>	\$	<u>62,201</u>

**Projected Data Chart- Other Operating Revenue
Methodist Healthcare-Memphs Hospitals**

		Year 1	Year 2
		2016	2017
		(in thousands)	
1.	Cafeteria	\$ 4	\$ 4
2.	Drugs	\$ 7,917	\$ 8,051
3.	Gift Shop	\$ 312	\$ 313
4.	Telephone	\$ 34	\$ 34
5.	Vending	\$ 371	\$ 376
6.	Shared Svc	\$ 317	\$ 323
7.	Tuition/Student Fees	\$ 356	\$ 360
8.	Office Rentals	\$ 5,441	\$ 5,495
9.	Parking	\$ -	\$ -
10.	340b Program	\$ 9,932	\$ 9,932
11.	HealthSouth	\$ 1,237	\$ 1,239
12.	Trauma Fund	\$ 593	\$ 593
13.	Rental Income	\$ 264	\$ 267
14.	Transp (ground & fixed wing)	\$ 1,261	\$ 1,273
15.	Gamma Knife	\$ 88	\$ 88
16.	Grants	\$ 789	\$ 796
17.	Other	\$ 22,467	\$ 22,984
Total Other Operating Revenue		\$ 51,382	\$ 52,129

**Projected Data Chart- Other Expenses
Methodist Healthcare-Memphs Hospitals**

		Year 1	Year 2
		2016	2017
		(in thousands)	
1.	Benefits	\$ 125,027	\$ 128,677
2.	Repairs	\$ 25,086	\$ 25,587
3.	Professional Fees	\$ 58,153	\$ 59,211
4.	Contract Service	\$ 75,648	\$ 77,073
5.	Auditing Fees	\$ 264	\$ 269
6.	Consulting Fees	\$ 2,158	\$ 2,201
7.	Legal Fees	\$ 171	\$ 175
8.	Other-Accounting & Legal	\$ 100	\$ 102
9.	Advertising	\$ 572	\$ 584
10.	Dues	\$ 1,402	\$ 1,430
11.	Travel	\$ 1,511	\$ 1,542
12.	Utilities	\$ 17,124	\$ 17,467
13.	Insurance	\$ 19,387	\$ 19,774
14.	Tansfers Reagents	\$ (86)	\$ (88)
15.	Tansfers Laundry	\$ 4,354	\$ 4,415
16.	Transfer Print Shop	\$ 876	\$ 893
17.	Transfer Telephone	\$ 1,159	\$ 1,182
18.	Transfers Transcription	\$ 4,825	\$ 4,925
19.	Trans Cost Maint	\$ 529	\$ 540
20.	Trans Cost Univ/Other Fac	\$ (23)	\$ (23)
21.	Other Transfers	\$ (63)	\$ (64)
22.	Books	\$ 173	\$ 176
23.	Other Bus Events	\$ 295	\$ 301
24.	Assoc Recruitment	\$ 324	\$ 331
25.	Phys Recruitment	\$ 4,233	\$ 4,194
26.	Credit Card Fees	\$ 600	\$ 612
27.	Bank Svc Charges	\$ 157	\$ 160
28.	Contributions	\$ 379	\$ 386
29.	UT Payments Oncol	\$ 16,105	\$ 16,241
30.	DP Software	\$ 274	\$ 279
31.	License and Accred Fees	\$ 752	\$ 754
32.	Postage	\$ 204	\$ 208
33.	Freight	\$ 1,902	\$ 1,940
34.	Telephone incl network cable	\$ 1,585	\$ 1,617
35.	Procurement Card	\$ 401	\$ 409
36.	Purchase Discounts	\$ (55)	\$ (56)
37.	Hosp Funding	\$ 640	\$ 640
38.	Other	\$ 291	\$ 297
39.	Mionority Interest	\$ 1,522	\$ 1,577
40.	Corporate Allocation	\$ 131,240	\$ 135,032
41.	Physician Margin Allocation	\$ 22,778	\$ 23,534
Total Other Expenses		\$ 521,977	\$ 534,506

6. A. Please provide the current and proposed charge schedules for the proposal. Discuss any adjustment to current charges that will result from the implementation of the proposal. Additionally, describe the anticipated revenue from the proposed project and the impact on existing patient charges.

There will be no change to the existing charge structure as a result of this project, yet there will be normal unrelated rate increases over the next several years. See the current MRI, CT, PET and LINAC charges below.

TABLE 18
METHODIST CURRENT CHARGE SCHEDULES

Procedure	CPT	Current Rate
MRI		
MRA HEAD WO CONT	70544	\$ 3,358
MRA NECK WO CONT	70547	\$ 3,358
MRI ABD W/WO CONT	74183	\$ 4,572
MRI ABD WO CONT	74181	\$ 3,358
MRI BRAIN & STEM W CONT	70552	\$ 3,816
MRI BRAIN & STEM W/WO CONT	70553	\$ 4,572
MRI BRAIN & STEM WO CONT	70551	\$ 3,358
MRI PELVIS W/WO CONT	72197	\$ 4,572
MRI SPINE CERV W/WO CONT	72156	\$ 4,572
MRI SPINE CERV WO CONT	72141	\$ 3,358
MRI SPINE LUMBAR W/WO CONT	72158	\$ 4,572
MRI SPINE LUMBAR WO CONT	72148	\$ 3,358
MRI SPINE THORACIC W/WO CONT	72157	\$ 4,572
MRI SPINE THORACIC WO CONT	72146	\$ 3,358
CT		
CT ABD AND PEL W/WO CONTRAST	74178	\$ 5,581
CT ABD AND PEL WITH CONTRAST	74177	\$ 4,796
CT ABD AND PEL WO CONTRAST	74176	\$ 3,464
CT ABD TRIPLE PHASE	74170	\$ 2,791
CT ABD W CONT	74160	\$ 2,398
CT ANGIO HEAD W/WO CONT W IMAGE POST PRO	70496	\$ 2,791
CT ANGIO NECK W/WO CONT W IMAGE POST PRO	70498	\$ 2,791
CT BRAIN/HEAD W/WO CONT	70470	\$ 2,791
CT BRAIN/HEAD WO CONT	70450	\$ 1,733
CT GUIDE ABSCESS DRNG PERCUT W CATH PLAC	75989	\$ 1,571
CT GUIDE NDL BX	77012	\$ 2,398
CT MAXILLOFACIAL AREA WO CONT	70486	\$ 1,733
CT SOFT TISSUE NECK W CONT	70491	\$ 2,398
CT SPINE CERV WO CONT	72125	\$ 1,733
CT SPINE LUMBAR WO CONT	72131	\$ 1,733
CT THORAX W CONT	71260	\$ 2,398
CT THORAX WO CONT	71250	\$ 1,733
CTA ABD/PELVIS W/WO CONTRAST	74174	\$ 3,049

Procedure	CPT	Current Rate
PET		
BRAIN IMAGE PET METABOLIC EVALUATION	78608	\$ 7,912
MYOCARDIAL IMAGING PET METABOLOC EVAL	78459	\$ 8,008
TUMOR IMAGING PET W/CT SKULL TO MIDTHIGH	78815	\$ 8,601
TUMOR IMAGING PET W/CT WHOLE BODY	78816	\$ 8,601
UNLISTED NUC MED PROCEDURE PET	78999	\$ 1,496
LINAC		
CONTINUING MEDICAL PHYSICS CONSULT W TRM	77336	\$ 521
CT GUIDE RADIATION THER FIELD PLACE	77014	\$ 845
HDR BASIC DOSIMETRY CALC	77300	\$ 521
HDR BRACHYTHERAPY 2-12 CHANNELS	77786	\$ 11,400
HDR ISODOSE CALC 12+SOURCES COMPLEX	77328	\$ 1,195
MEDICAL RADIATION PHYSICS CONSULT SPEC	77370	\$ 1,195
RADIATION DOSIMETRY CALC BASIC	77300	\$ 521
RADIATION THERAPY DELIVERY, IMRT	77418	\$ 2,507
RADIATION THERAPY DELIVERY, VMAT	77418	\$ 2,507
RADIATION TRMT 3+AREAS 11-19MEV	77414	\$ 663
RADIATION TRMT 3+AREAS 6-10MEV	77413	\$ 663
SPEC TRMT PROC	77470	\$ 1,611
STEROSCOPIC XRAY GUIDANCE DELIVERY	77421	\$ 469
TELEETHER ISODOSE PLAN COMPLEX	77315	\$ 1,195
THER RAD PORT FILM/FILMS	77417	\$ 373
THER RAD SIMULATION AIDED FIELD 3D	77295	\$ 4,654
THER RAD SIMULATION AIDED FIELD COMPLEX	77290	\$ 1,195
THER RAD SIMULATION AIDED FIELD SIMP	77280	\$ 521
TRMT DEVICE DESIGN & CONSTRUCT COMPLEX	77334	\$ 961

B. Compare the proposed charges to those of similar facilities in the service area/adjoining service areas, or to proposed charges of projected recently approved by the Health Services and Development Agency. If applicable, compare the proposed charges of the project to the current Medicare allowable fee schedule by common procedure terminology (CPT) code(s).

Based upon the review, the proposed charges are reasonable and comparable for MRI, CT, PET and LINAC services in the service area. There will be no impact to the charge structure due to this project. Tables 19 through 22 below show the comparisons of charges based on data from the 2012 State Equipment Registry. With normal rate increases, projected revenue is reasonable and comparable.

TABLE 19
METHODIST SERVICE AREA
ADULT HOSPITAL-BASED MRI CHARGE COMPARISON, 2012

Facility Type	Facility	Charge per Procedure
HOSP	Baptist Memorial Hospital-Collierville	\$ 2,386
HOSP	Baptist Memorial Hospital-Memphis	\$ 2,438
HOSP	Baptist Memorial Hospital-Tipton	\$ 2,347
HOSP	Regional Medical Center at Memphis	\$ 3,101
HOSP	St. Francis Hospital	\$ 4,096
HOSP	St. Francis Hospital – Bartlett	\$ 2,743
HOSP	Methodist Healthcare – University Hospital	\$ 3,545

TABLE 20
METHODIST SERVICE AREA
HOSPITAL-BASED CT CHARGE COMPARISON, 2012

Facility Type	Facility	Charge per Procedure
HOSP	Baptist Memorial Hospital-Collierville	\$ 2,482
HOSP	Baptist Memorial Hospital-Memphis	\$ 2,276
HOSP	Baptist Memorial Hospital for Women	\$ 2,832
HOSP	Baptist Memorial Hospital-Tipton	\$ 2,558
HOSP	Regional Medical Center at Memphis	\$ 2,493
HOSP	St. Francis Hospital	\$ 4,827
HOSP	St. Francis Hospital – Bartlett	\$ 4,451
HOSP	Methodist Healthcare – University Hospital	\$ 2,437

TABLE 21
METHODIST SERVICE AREA
HOSPITAL-BASED PET CHARGE COMPARISON, 2012

Facility Type	Facility	Charge per Procedure
HOSP	Baptist Memorial Hospital-Memphis	\$ 6,869
H-IMAGING	Baptist Memorial Hospital-Tipton	\$ 7,268
PED-HOSP	St. Jude Children's Research Hospital	\$ 6,603
HOSP	Methodist Healthcare -- University Hospital	\$ 8,186

TABLE 22
METHODIST SERVICE AREA
HOSPITAL-BASED LINAC CHARGE COMPARISON, 2012

Facility Type	Facility	Charge per Procedure
HOSP	Baptist Memorial Hospital-Memphis	\$ 5,526
HOSP	Baptist Memorial Hospital-Tipton	\$ 7,610
HOSP	Regional Medical Center at Memphis	\$
HOSP	St. Francis Hospital	\$ 3,398
HOSP	Methodist Healthcare -- University Hospital	\$ 7,919

7. Discuss how projected utilization rates will be sufficient to maintain cost-effectiveness.

The projections in this application demonstrate that Methodist will remain financially viable. The comparisons of average charges at facilities of similar approved scope, as documented in the previous section, demonstrate that the applicant will remain relatively cost-effective.

8. Discuss how financial viability will be ensured within two years; and demonstrate the availability of sufficient cash flow until financial viability is achieved.

As reflected in this application's historic and projected data charts, Methodist Healthcare and Methodist Healthcare-Memphis Hospitals are viable today, and will remain financially viable during its first two years of operation and subsequently.

9. Discuss the project's participation in state and federal revenue programs including a description of the extent to which Medicare, TennCare/Medicaid, and medically indigent patients will be served by the project. In addition, report the estimated dollar amount of revenue and percentage of total project revenue anticipated from each of TennCare, Medicare, or other state and federal sources for the proposal's first year of operation.

Methodist currently serves the Medicare, TennCare, and medically indigent populations. The estimated payor mix for 2016, the first full year of operation, is shown below.

TABLE 23
PROJECTED PAYOR MIX, 2016

Payor	Revenue	% of Total Revenue
Medicare	\$ 1,967,651,659	34%
TennCare/Medicaid	\$ 1,345,522,814	23%
Self Pay	\$ 323,427,151	6%
Commercial/Other	\$ 2,103,635,553	37%
Total	\$ 5,740,237,148	100%

- 10. Provide copies of the balance sheet and income statement from the most recent reporting period of the institution and the most recent audited financial statements with accompanying notes, if applicable. For new projects, provide financial information for the corporation, partnership, or principal parties involved with the project. Copies must be inserted at the end of the application, in the correct alpha-numeric order and labeled as Attachment C, Economic Feasibility-10.**

Audited financials and cash are held at the corporate level, therefore, please see the attached most recent audited financials for Methodist Healthcare. Also, a balance sheet for the period ending September 2013 for Methodist Healthcare is included along with an income statement for Methodist Healthcare – Memphis Hospitals. See Attachment C: Economic Feasibility (10).

- 11. Describe all alternatives to this project which were considered and discuss the advantages and disadvantages of each alternative including but not limited to:**
- a. A discussion regarding the availability of less costly, more effective, and/or more efficient alternative methods of providing the benefits intended by the proposal. If development of such alternatives is not practicable, the applicant should justify why not; including reasons as to why they were rejected.**
 - b. The applicant should document that consideration has been given to alternatives to new construction, e.g., modernization or sharing arrangements. It should be documented that superior alternatives have been implemented to the maximum extent practicable.**

Response to a. and b. above:

Methodist considered other options prior to proposing this consolidation, expansion and renovation project. Alternatives to the proposed project included: do nothing and continue to operate at extremely high occupancy levels with fragmented care or build a new center from the ground up.

Do Nothing

This option was rejected because the cited fragmentization and capacity issues will not disappear without action. They are the source of significant patient and physician satisfaction concerns. The fragmented cancer care in the market today can lead to patient dissatisfaction and anxiety, unnecessary costs, duplication of services and breaks in communication between caregivers on treatment plans. There is only one dominant strategy for cancer care providers to consider. It is the development of a collaborative, integrated multidisciplinary cancer program. Cancer providers that clearly and efficiently develop and operationalize this approach will create higher standards of care, complex treatment options, better research opportunities and access to multi-phase clinical trials. This

type of care program will increase patient's knowledge and care expectations by experiencing a system designed to reduce or eliminate disparate experiences of care.

Build a New Facility

This option was cost prohibitive. Methodist, as good stewards of its resources, reviewed available space in the planning stages of the project, looked for the most cost effective options and developed plans to redeploy assets versus building any new buildings. The proposed building is currently utilized by Methodist, Methodist affiliates and other non-affiliated health care providers. Renovations are required to ensure the hospital-based space meets hospital construction codes and to make improvements required for treating cancer patients in a patient and family centered environment.

The proposed project is by far the most rational long-range investment. The consolidation, expansion and renovation will meet the community's health care needs for years to come. This alternative is the only option that can address capacity and efficiency needs; accommodate new technologies and innovation; and a coordinated system of care that meets patients and families needs.

CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTH CARE

1. **List all existing health care providers (e.g., hospitals, nursing homes, home care organizations, etc.), managed care organizations, alliances, and/or networks with which the applicant currently has or plans to have contractual and/or working relationships, e.g., transfer agreements, contractual agreements for health services.**

Methodist Healthcare has working relationships with the following physician groups:

- The West Clinic
- UT Medical Group, Inc.
- UT Le Bonheur Pediatric Specialists
- Campbell Clinic Orthopaedics
- Duckworth Pathology Group
- Pediatric Anesthesiologists PA
- Pediatric Emergency Specialists PC
- Semmes-Murphey Neurologic and Spine Institute
- Methodist Primary and Specialty Care Groups (See Attachment A:4 for Organizational Chart)

The Methodist Healthcare-Memphis Hospitals' license includes five hospitals:

- Methodist Healthcare-University Hospital
- Methodist Healthcare-South Hospital
- Methodist Healthcare-North Hospital
- Methodist Healthcare-Le Bonheur Germantown Hospital
- Le Bonheur Children's Hospital

Additionally, Methodist Healthcare owns and operates Methodist Alliance Services, a comprehensive home care company, and a wide array of other ambulatory services such as minor medical and urgent care centers, outpatient diagnostic centers and ambulatory surgery centers.

Methodist Healthcare is part of the University Medical Center Alliance which also includes the University of Tennessee and the Memphis Regional Medical Center (The Med). The goal of this council is to support the quality of care, patient safety and efficiency across all three institutions.

There are also agreements with the Mid-South Tissue Bank, the Mid-South Transplant Foundation, Duckworth Pathology and PhyAmerica. In addition, there is an agreement with Premier Purchasing Partners.

A list of managed care contracts is attached in Attachment C: Orderly Development (1).

2. **Describe the positive and/or negative effects of the proposal on the health care system. Please be sure to discuss any instances of duplication or competition arising from your proposal including a description of the effect the proposal will have on the utilization rates of existing providers in the service area of the project.**

The proposed project will have a positive impact on the Shelby County health care community. The project does not propose to increase the applicant's market share and, there are no new services offered in this application.

This project is for the establishment of an integrated comprehensive cancer center. The key attribute of such a center is the ability to cohesively coordinate and integrate all aspects of state-of-the-art cancer care. These aspects include clinical research, collaborative patient care, education, prevention dissemination and community outreach programs. The consolidation of sites and health care resources will elevate the

collaboration of the oncologist, radiologist, surgeon, patient and family at each outpatient encounter; bringing a seamless continuum of care and comprehensive approach to the healing and treatment processes.

3. **Provide the current and/or anticipated staffing pattern for all employees providing patient care for the project. This can be reported using FTEs for these positions. Additionally, please compare the clinical staff salaries in the proposal to prevailing wage patterns in the service area as published by the Tennessee Department of Labor & Workforce Development and/or other documented sources.**

Staffing will not be increased with this project. Efficiencies gained from the new delivery models will support the redeployment of personnel in positions that are no longer needed into other aspects of the cancer delivery system.

All positions at Methodist are reviewed at least annually for market competitiveness. Tools for analysis for this review are comprised of several local and regional surveys, as well as several national surveys. Methodist strives to be competitive in pay and pay reported in the aforementioned surveys.

4. **Discuss the availability of and accessibility to human resources required by the proposal, including adequate professional staff, as per the Department of Health, the Department of Mental Health and Developmental Disabilities, and/or the Division of Mental Retardation Services licensing requirements.**

Staffing will not be increased with this project. Efficiencies gained from the new delivery models will support the redeployment of personnel in positions that are no longer needed into other aspects of the cancer delivery system. The redeployment of staff will take place incrementally over the three years. Methodist fortunately has the resources to successfully support these efforts.

5. **Verify that the applicant has reviewed and understands all licensing certification as required by the State of Tennessee for medical/clinical staff. These include, without limitation, regulations concerning physician supervision, credentialing, admission privileges, quality assurance policies and programs, utilization review *policies and programs*, record keeping, and staff education.**

The applicant so verifies. Methodist reviewed and meets all the State requirements for physician supervision, credentialing, admission privileges, and quality assurance policies and programs, utilization review policies and programs, record keeping, and staff education.

6. **Discuss your health care institution's participation in the training of students in the areas of medicine, nursing, social work, etc. (e.g., internships, residencies, etc.).**

Methodist Healthcare has clinical affiliation agreements with multiple colleges including 23 for nursing, 30 for rehabilitation service professionals (physical therapy, speech therapy, and audiology), 3 for pharmacy, and 19 for other allied health professionals including paramedics, laboratory, respiratory therapy, radiation therapy technicians. There are approximately 1400 students annually participating in these programs.

Methodist participates very heavily in the training of students from various medical disciplines. Since relationships exist with most of the schools in Memphis, most of the students have also been trained academically in this region. The three primary disciplines that participate in the training of students at Methodist are medicine, nursing and psychosocial services.

In the area of medicine, there are many different specialties represented in the interns and residents who train at Methodist – there are 21 different specialties. Likewise, since there are several nursing schools in the area, Methodist is very active in the training of future nurses. These nurses come from several types of programs, which include Bachelor's Degrees, Associate Degrees, Licensed Practical Nurse programs and Diploma programs. Methodist participates in training of students from the following schools:

Methodist Healthcare
University of Memphis
Baptist Health System
Southwest Tennessee Community College

University of Tennessee
Northwest Mississippi Jr. College
Regional Medical Center
Tennessee Centers of Technology

7. (a) **Please verify, as applicable, that the applicant has reviewed and understands the licensure requirements of the Department of Health, the Department of Mental Health and Developmental Disabilities, the Division of Mental Retardation Services, and/or any applicable Medicare requirements.**

Methodist reviewed and meets all applicable requirements of the Department of Health. Other departments are not involved with this facility.

- (b) **Provide the name of the entity from which the applicant has received or will receive licensure, certification, and/or accreditation.**

Licensure:

The general hospital license held by Methodist is from the Tennessee Department of Health, Board for Licensing Health Care Facilities.

Accreditation:

The accreditation agency for Methodist is the Joint Commission on Accreditation of Healthcare Organizations, from whom the hospital has a full three-year accreditation.

- (c) **If an existing institution, please describe the current standing with any licensing, certifying, or accrediting agency. Provide a copy of the current license of the facility.**

Methodist is in good standing with the Department of Health, the Healthcare Facility Licensing Board, and JCAHO. The hospital license and accreditation report is attached. (See Attachment C: Orderly Development (7)(c))

- (d) **For existing licensed providers, document that all deficiencies (if any) cited in the last licensure certification and inspection have been addressed through an approved plan of correction. Please include a copy of the most recent licensure/certification inspection with an approved plan of correction.**

Documentation regarding deficiencies and approved plan of correction in our licensure is attached. See Attachment C: Orderly Development (7)(d)(1) and C: Orderly Development (7)(d)(2).

8. **Document and explain any final orders or judgments entered in any state or country by a licensing agency or court against professional licenses held by the applicant or any entities or persons with more than a 5% ownership interest in the applicant. Such information is to be provided for licenses regardless of whether such license is currently held.**

None

9. **Identify and explain any final civil or criminal judgments for fraud or theft against any person or entity with more than a 5% ownership interest in the project.**

None

- 10. If the proposal is approved, please discuss whether the applicant will provide the Tennessee Health Services and Development Agency and/or the reviewing agency information concerning the number of patients treated, the number and type of procedures performed, and other data as required.**

Should this application be approved, Methodist will provide the Tennessee Health Services and Development Agency and/or the reviewing agency information concerning the number of patients treated, the number and type of procedures performed, and other data as required.

PROOF OF PUBLICATION

Attach the full page of the newspaper in which the notice of intent appeared with the mast and dateline intact or submit a publication affidavit from the newspaper as proof of the publication of the letter of intent.

The full page of the Commercial Appeal newspaper in which the Notice of Intent appeared is attached as Attachment C: Proof of Publication.

DEVELOPMENT SCHEDULE

Tennessee Code Annotated § 68-11-1609(c) provides that a Certificate of Need is valid for a period not to exceed three (3) years (for hospital projects) or two (2) years (for all other projects) from the date of its issuance and after such time shall expire; provided, that the Agency may, in granting the Certificate of Need, allow longer periods of validity for Certificates of Need for good cause shown. Subsequent to granting the Certificate of Need, the Agency may extend a Certificate of Need for a period upon application and good cause shown, accompanied by a non-refundable reasonable filing fee, as prescribed by rule. A Certificate of Need which has been extended shall expire at the end of the extended time period. The decision whether to grant such an extension is within the sole discretion of the Agency, and is not subject to review, reconsideration, or appeal.

1. Please complete the Project Completion Forecast Chart on the next page. If the project will be completed in multiple phases, please identify the anticipated completion date for each phase.

See the Project Completion Forecast Chart.

2. If the response to the preceding question *indicates that the applicant does not anticipate completing the project within the period of validity as defined in the preceding paragraph*, please state below any request for an extended schedule and document the "good cause" for such an extension.

Not applicable. The project is a hospital project and is forecasted to be complete within three years from the date of issuance.

PROJECT COMPLETION FORECAST CHART

Enter the Agency projected Initial Decision date, as published in T.C.A. § 68 –11-1609(c): February 26, 2014

Assuming the CON approval becomes the final agency action on that date; indicate the number of days **from the above agency decision date** to each phase of the completion forecast.

<u>Phase</u>	<u>DAYS REQUIRED</u>	<u>Anticipated Date (MONTH/YEAR)</u>
1. Architectural and engineering contract signed	<u>30</u>	<u>Mar / 2014</u>
2. Construction documents approved by the Tennessee Department of Health	<u>90</u>	<u>May / 2014</u>
3. Construction contract signed	<u>30</u>	<u>Mar / 2014</u>
4. Building permit secured	<u>90</u>	<u>May / 2014</u>
5. Site preparation completed	<u>210</u>	<u>Sept / 2014</u>
6. Building construction commenced	<u>120</u>	<u>June / 2014</u>
7. Construction 40% complete	<u>300</u>	<u>Dec / 2014</u>
8. Construction 80% complete	<u>420</u>	<u>Apr / 2015</u>
9. Construction 100% complete (approved for occupancy)	<u>510</u>	<u>July / 2015</u>
10. *Issuance of license	<u>540</u>	<u>August / 2015</u>
11. *Initiation of service	<u>540</u>	<u>August / 2015</u>
12. Final Architectural Certification of Payment	<u>630</u>	<u>Nov / 2015</u>
13. Final Project Report Form (HF0055)	<u>660</u>	<u>Dec / 2015</u>

* For projects that do NOT involve construction or renovation: Please complete items 10 and 11 only.

Note: If litigation occurs, the completion forecast will be adjusted at the time of the final

ATTACHMENTS

INDEX OF ATTACHMENTS

A:3	Corporate Charter and Certificate of Existence
A:4	Ownership-Legal Entity and Organization Chart
A:6	Site Control
B:II(E)(1)	FDA Certificate
B:II(E)(3)	Equipment Vendor Quotes
B:III (A)	Plot Plan
B:III (B)	Road Maps and Public Transportation Routes
B:IV	Floor Plans
C: LINAC Services (6)(d)	Outpatient Diagnostic Services System Policy
C: LINAC Services (6)(f)	Medical Director CV
C: Need (3)	Service Area Map
C: Economic Feasibility (1)(c)	Moveable Equipment Listing > \$50,000
C: Economic Feasibility (1)(d)	Documentation of Construction Cost Estimate
C: Economic Feasibility (2)	Documentation of Availability of Funding
C: Economic Feasibility (4)	Detail of Other Revenue and Expense
C: Economic Feasibility (10)	Financial Statements
C: Orderly Development (1)	List of Managed Care Contracts
C: Orderly Development (6)	List of Clinical Affiliations
C: Orderly Development (7)(c)	License from Board of Licensing Health Care Facilities
C: Orderly Development (7)(d)(1)	TDH Licensure Survey and Plan of Correction
C: Orderly Development (7)(d)(2)	Joint Commission Accreditation and Survey Summary
C: Proof of Publication	
Support Letters	

B: III (A)
Plot Plan

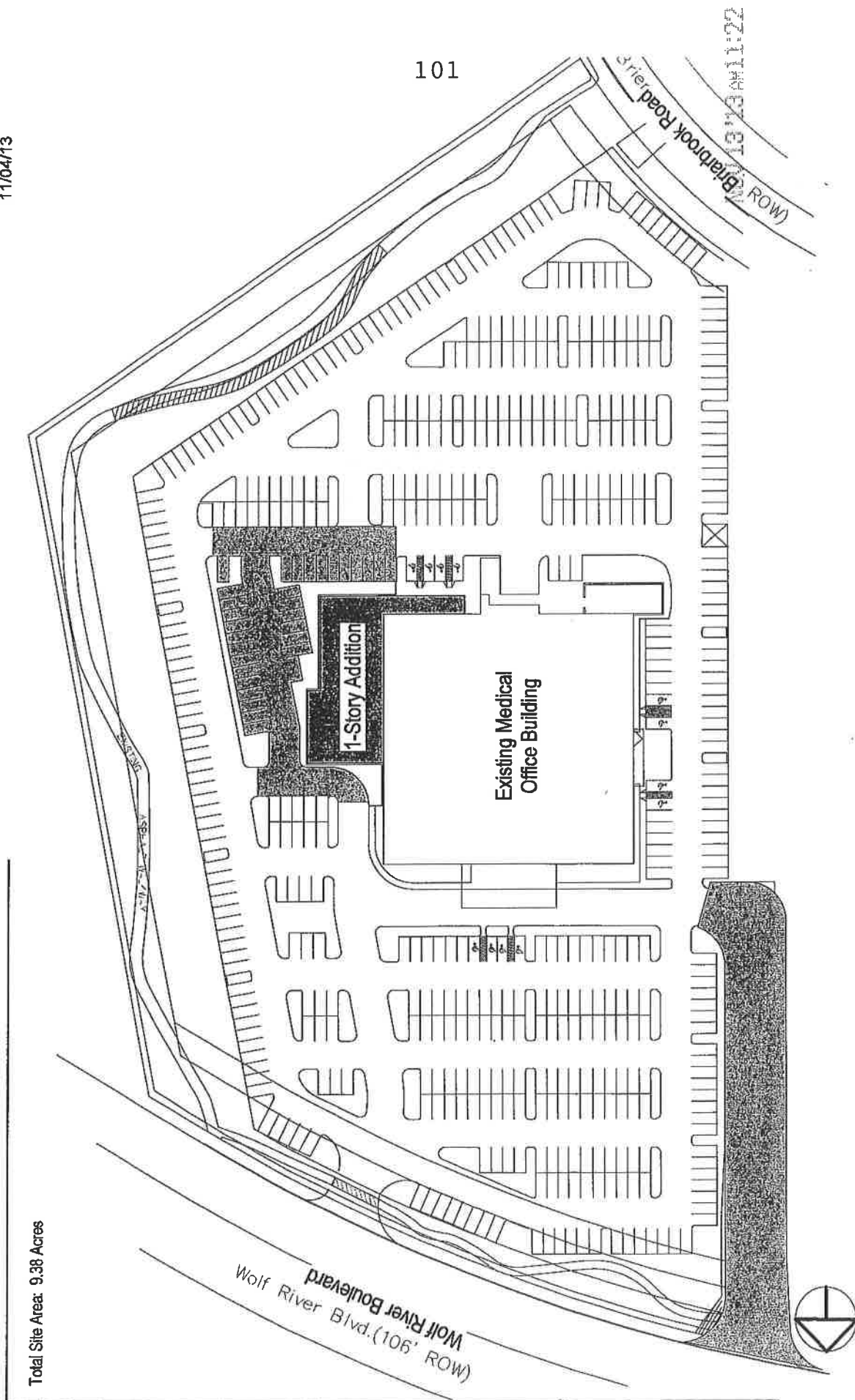
The West Cancer Center

7945 Wolf River Boulevard, Germantown, TN 38138

11/04/13

C.O.N. Site Plan

Total Site Area: 9.38 Acres



healthcare

B: III (B)
Road Maps and
Public Transportation Route

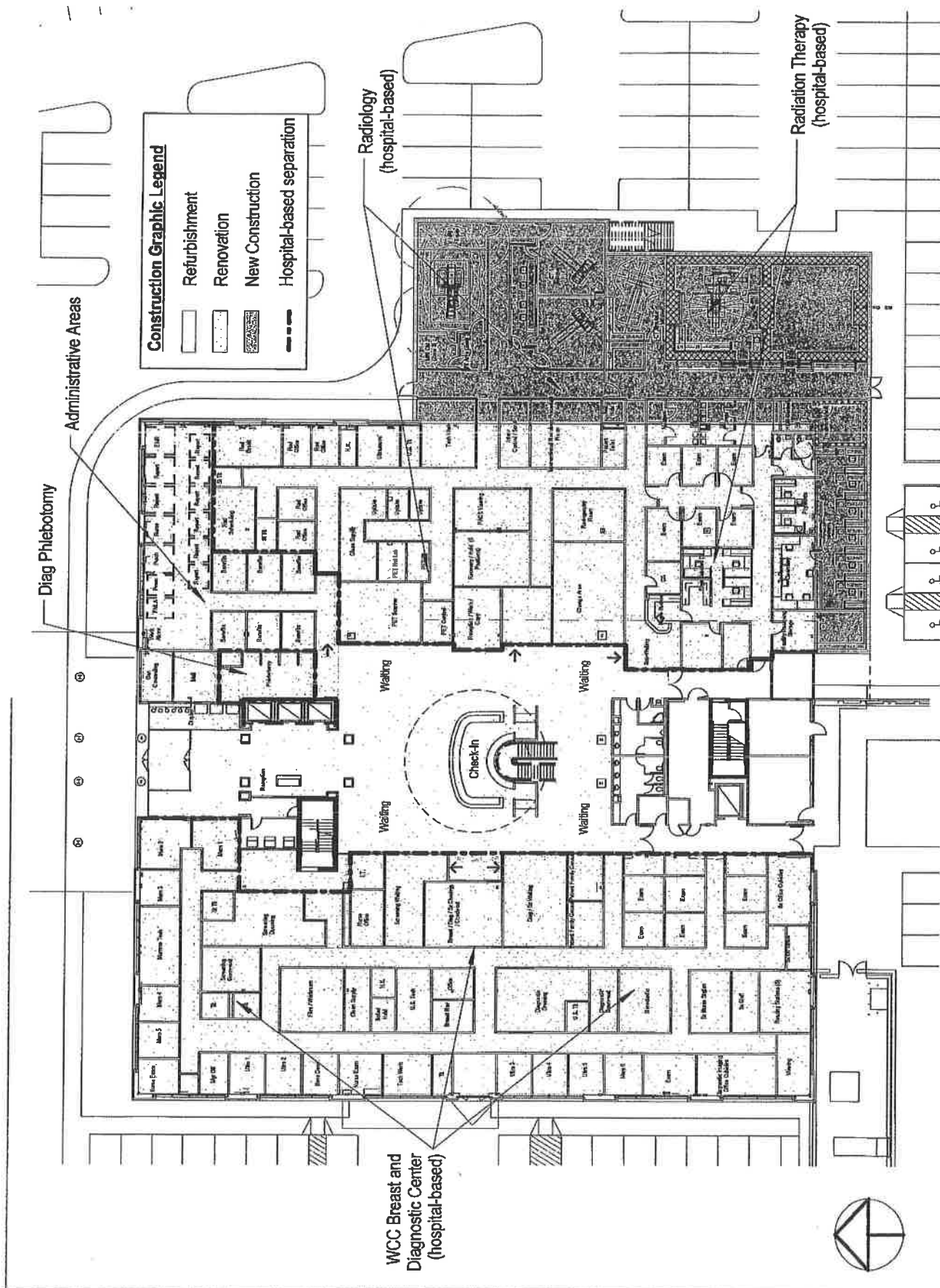
B: IV
Floor Plans

C.O.N. 1st Floor Plan

7945 Wolf River Boulevard, Germantown, TN 38138

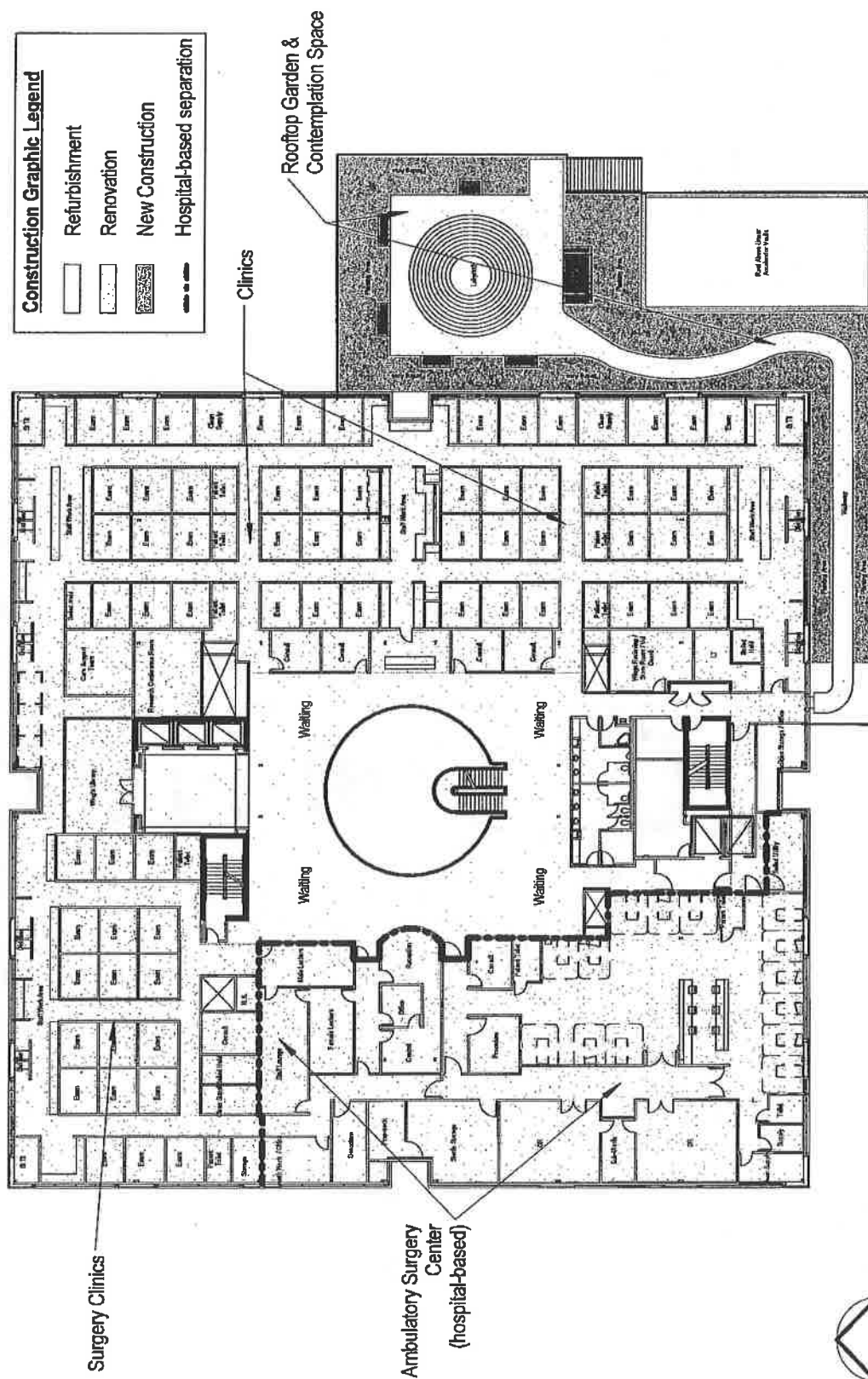
11/04/13

104

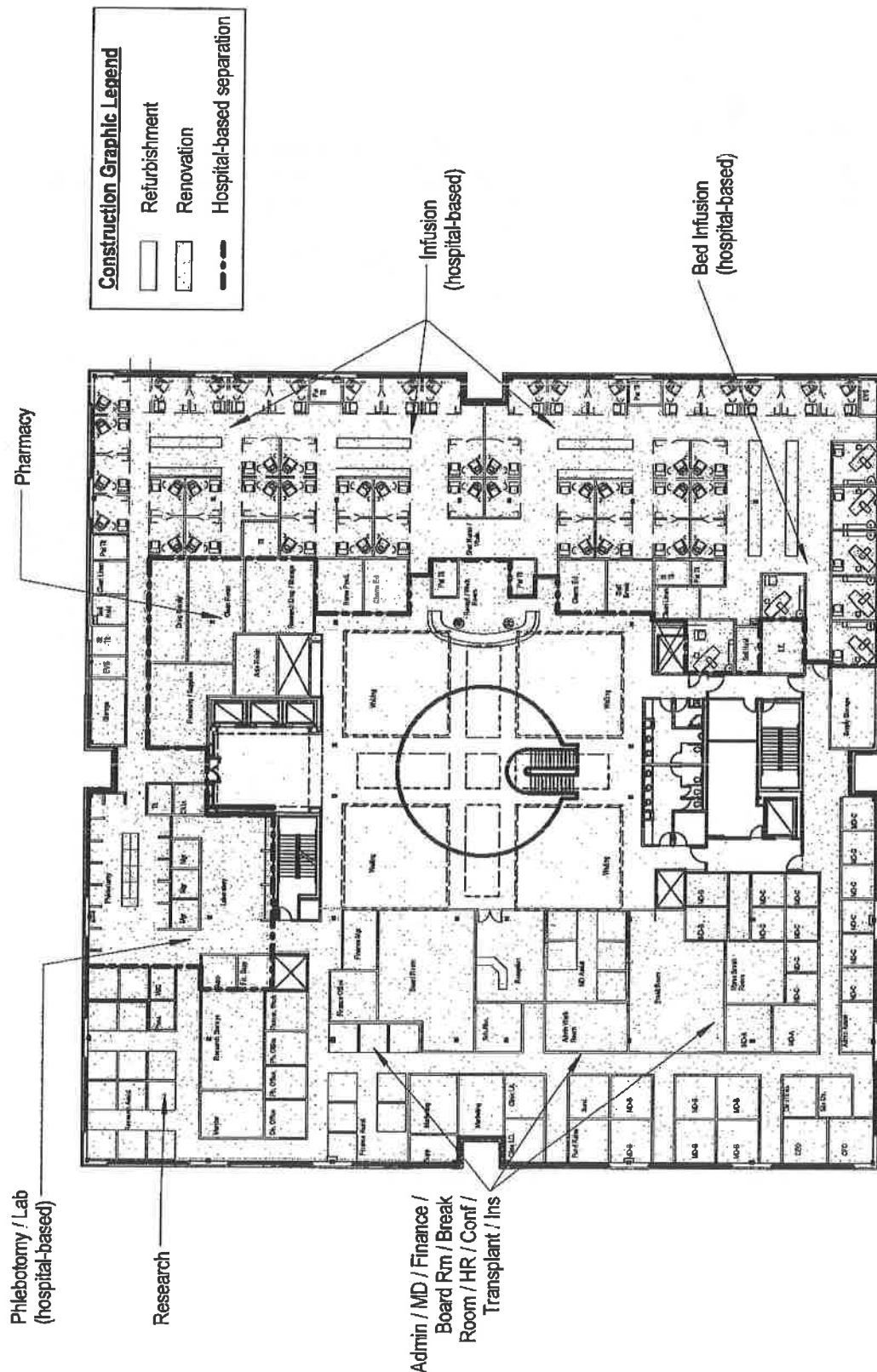


C.O.N. 2nd Floor Plan

7945 Wolf River Boulevard, Germantown, TN 38138
11/04/13



C.O.N. 3rd Floor Plan



**C: MRI Services (7)(d)
Outpatient Diagnostic
Services System Policy**

	THIS	REPLACES
108 INDEX	S-05-051	
REVISED	04/03/06	01/10/06
EFFECTIVE	01/01/01	
PAGE	1 of 2	

SYSTEM POLICY

ORIGINATOR: Administration

SUBJECT: Outpatient Orders for Diagnostic Services

PURPOSE: To establish guidelines under which the medical staff can order outpatient, non-surgical services in a Methodist Healthcare facility.

FUNCTIONS AFFECTED: Patient Access Services (including Scheduling, Patient Registration, Outpatient Care Center), all ancillary service areas, Health Information Management (outpatient record department) and Utilization Review.

POLICY: Methodist Healthcare recognizes that federal legislation placed an affirmative duty on Hospitals and Physicians to document authorization and medical necessity for outpatient diagnostic services. Failure to abide by CMS regulations has serious penalties for providers of healthcare, including the possibility of personal liability for those who do not properly document and code.

All functions affected must work with Medical staff members and referring physicians to ensure that the following guidelines are met prior to procedures being performed:

1. All requests for diagnostic outpatient services (i.e. any test, procedure, treatment or other service) must be accompanied by a **written, signed and dated** Physician order. A Physician or a Nurse Practitioner may submit this signed order. Rubber stamp signatures are not acceptable. In the case of recurrent care outpatient encounters, one order will be valid for 6 months as long as the physician name, treatment regimen and medical necessity documentation remains unchanged.
2. Patients arriving for an outpatient diagnostic service for whom an order has not been sent to Patient Access or the ancillary department prior to the patients' arrival, will be asked to wait or be rescheduled until the order is received by facsimile or other appropriate means.

In order to ensure compliance for our coding and billing functions, this policy will be followed for all payer groups (not just our Medicare patient population).

C: LINAC Services (6)(f)
Medical Director CV

Holger L. Gieschen, M.D.

Office:

Memphis Radiological Professional Corporation
 7695 Poplar Pike
 Germantown, TN 38139

Phone: Office: (901) 685-2696

Home: (901) 861-5398

Home:

2186 Houston Pass
 Germantown, TN 38139

E-mail: holger.gieschen@mlh.org

PROFESSIONAL EXPERIENCE

- | | |
|---------------------|---|
| 2010- 2012 | Chairman of Methodist Healthcare Cancer Committee |
| 2007 – present | Director of Radiation Oncology
Methodist Healthcare, Memphis and Germantown ,TN |
| Feb 2003 – Feb 2011 | Board Member Memphis Radiological Professional Corporation |
| Feb 1999 - present | Memphis Radiological Professional Corporation
Methodist University Hospital
Memphis, TN |
- 3 D conformal External Beam Radiotherapy
 - Intensity Modulated Radiotherapy (IMRT)
 - Image Guided Radiotherapy (IGRT)
 - Stereotactic Body Radiotherapy (SBRT)
 - HDR Brachytherapy
 - Accelerated Partial Breast Irradiation
 - MammoSite
 - SAVI
 - Contura
 - Gynecologic applications
 - Soft tissue interstitial implants
 - LDR Brachytherapy
 - Prostate Seed Implants
 - Gamma Knife Radiosurgery
 - Glia-Site Brachytherapy
 - Coronary Intravascular Brachytherapy
 - Novoste Beta-cath
 - Guidant Galileo III System

- | | |
|-----------------------|--|
| Jan 1997 – Jan 1999 | Massachusetts General Hospital
Boston, MA
Clinical Associate, Dept of Radiation Oncology |
| July 1995 – Jan 1999 | Cape and Island Radiation Therapy Center
Cape Cod Hospital
Hyannis, MA
Attending Physician <ul style="list-style-type: none"> ○ 3 D conformal External Beam Radiotherapy <ul style="list-style-type: none"> ▪ Render Plan System ○ Prostate Seed Implants |
| July 1991 – June 1995 | Medical College of Virginia
Richmond VA.
Dept. of Radiation Oncology
Residency in Radiation Oncology |
| Apr 1994 – Apr 1995 | Chief Resident |
| Feb 1990 – June 1991 | Washington Hospital Center
Washington D.C.
Dept. of Internal Medicine
U.S. Internship |
| Jan 1987 – Dec 1989 | Medizinische Hochschule (Medical College of Hannover)
Hannover, Germany
Dept. of Internal Medicine – Nephrology
Residency |

ACADEMIC APPOINTMENTS

Assistant Professor , Dept. of Radiology
University of Tennessee

BOARD CERTIFICATION

Radiation Oncology (American Board of Radiology)
July 1996

Re-certification: April 2006- expires 2016

EDUCATION

Oct 1980 – Oct 1986 Christian-Albrecht-University, Medical School
Kiel, Germany
Doctorate in Medicine 11/21/86

Sept 1977 – May 1980 Buergermeister-Smidt-Gymnasium
Bremerhaven, Germany
Major: Mathematics and Physics
Degree: Abitur 5/21/80

OTHER EXAMINATIONS

Educational Commission for Foreign Medical Graduates
(ECFMG- Certificate)
July 1989

Federation Licensing Examination (Flex Exam)
Dec 1991

PUBLICATIONS – ARTICLES

Gieschen HL, Spiro IJ, Suit HD, Ott MJ, Rattner DW,
Ancukiewicz M, Willett CG
Long-Term Results of Intraoperative Electron Beam
Radiotherapy for Primary and Recurrent Retroperitoneal Soft
Tissue Sarcoma. International Journal of Radiation
Oncology, Biology, Physics 50 (1):127-131:2001

Holger L. Gieschen, Christopher G. Willett, Ira J. Spiro, Herman D. Suit, David W Rattner, Mark J. Ott
Long-Term Results of Intraoperative Electron Beam Radiotherapy for Primary and Recurrent Retroperitoneal Soft Tissue Sarcoma. International Journal of Radiation Oncology, Biology, Physics 42 (Suppl 1): 192, (Abstr) 1998

Kavanagh BD, Gieschen HL, Schmidt-Ullrich RK, Arthur D, Zwicker R, Kaufman N, Goplerud DR, Segretti EM, West RJ. A pilot study of concomitant boost accelerated superfractionated radiotherapy for stage III cancer of the uterine cervix International Journal of Radiation Oncology, Biology, Physics 38(3):561-568, 1997

Gieschen H, Kavanagh B, Kaufman n, West R, Goplerud D, Schmidt-Ullrich R. A Pilot Study of Accelerated Superfractionated Radiotherapy for Locally Advanced Cancer of the Uterine Cervix Interational Journal of Radiation Oncology, Biology, Phusics 32 (Suppl 1): 225,(Abstr) 1995

Zwicker RD, Atari NA, Kavanagh BD, Gieschen HL, Arnfield MR, Khandekwal SR, Schmidt-Ullrich RK. Clinical use of a digital simulator for rapid setup verification in high dose rate brachytherapy. International Journal of Radiation Oncology, Biology, Physics. 33(4): 931-6, 1995 Nov 1.

Gutsche, H.-U., Bonnke, P., Gieschen, H., Niedermayer, W. Effect of Cyclosporine A (CsA) on the activity of the tubuloglomerular feedback mechanism. The Juxtaglomerular Apparatus, 469-472. Elsevier, Amsterdam. 1988.

Gieschen, Holger Effekt von Diltiazem und Captopril auf die Funktionsparameter der Rattenniere nach Ciclosporin-A-Vorbehandlung unter Natriumchloridarmer Diaet. Doctoral Dissertation.Kiel, Germany. 1989.

Chapter 18: Electron or Orthovoltage IORT for Retroperitoneal Sarcomas
Holger L. Gieschen, Christopher G. Willett, John Donohue, Iry Peterson, Ira J. Spiro, Felipe A. Calvo, Leonard L. Gunderson in: **Textbook on Intraoperative Irradiation – Techniques and Results. First Edition 1999**

**Holger L. Gieschen, Christopher G. Willett, Ira J. Spiro,
David W. Rattner, Mark J. Ott, Herman D. Suit**
Long-Term Results of Intraoperative Electron Beam
Radiotherapy for Primary and Recurrent Retroperitoneal
Soft Tissue Sarcoma. Oral Presentation- ASTRO 40th Annual
Meeting, Phoenix, Arizona, 1998

**Holger L. Gieschen, Prostate Specific Antigen (PSA)
Following Definitive External Beam Radiotherapy – The
Cape Cod Hospital Experience - Poster
ASTRO PSA Symposium, San Antonio, Texas
September 28, 1996**

Gieschen H, Kavanagh B, Kaufman, West R, Goplerud D, Schmidt-Ullrich R. A Pilot Study of Accelerated Hyperfractionated Radiotherapy for Locally Advanced Cancer of the Uterine Cervix – Poster Discussion Session ASTRO 37th Annual Meeting, Miami Beach, FL October 8-11, 1995

Certification in Intracoronary Brachytherapy using the Novoste® Brachytherapy Delivery System, 2001

Leksell Gamma-Knife Training Program
Cromwell Hospital Gamma Knife Centre, London, UK
Oct. 1999

Ultrasonically Guided I¹²⁵/Pd¹⁰³ Seed Implantation for the Treatment of Early Stage Prostate Cancer
Northwest Hospital, Seattle, WA Jan 1996
with additional training in this technique at St. Elisabeth Hospital, Boston, MA

Papillon-Technique for the treatment of primary and recurrent rectal cancer.
Roswell Park Cancer Institute, Buffalo, NY 1995

OTHER PROFESSIONAL ACTIVITIES

Practice Accreditation Surveyor for the American College of Radiology 1998 to 2001

BLS and ACLS Certification

AWARDS

Valedictorian, 1980
Bürgermeister-Smidt-Gymnasium
Bremerhaven, Germany

PROFESSIONAL MEMBERSHIPS

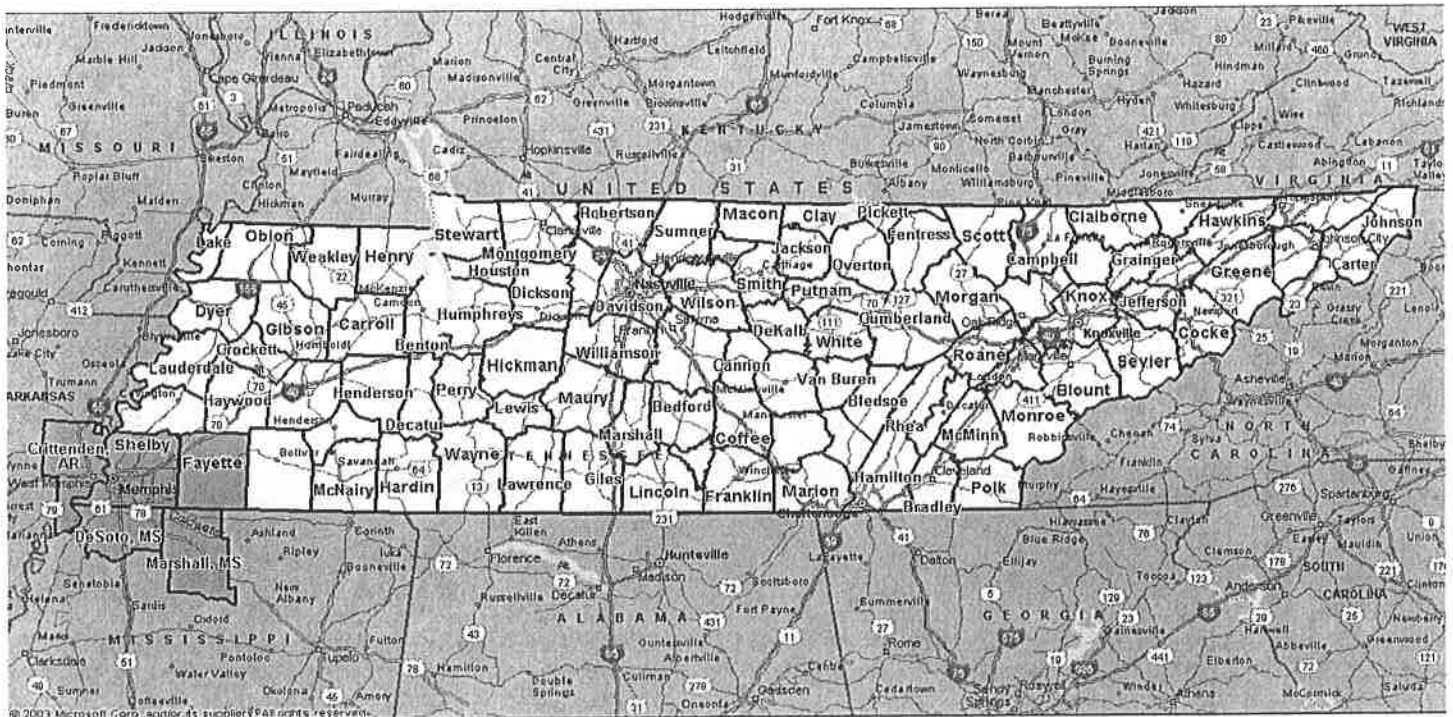
American Society for Therapeutic Radiology and Oncology (ASTRO), (1991)

American College of Radiology (ACR), (1997)

Fletcher Society, (1997)

C: Need (3)
Service Area Map

Methodist Service Area



Methodist Healthcare – Memphis Hospitals Tennessee Portion of Service Area



C: Economic Feasibility (1)(c)
Moveable Equipment Listing >\$50,000

MOVEABLE EQUIPMENT LIST > \$50,000

ITEM DESCRIPTION	TOTAL
LINAC	\$1,916,102
MRI 1.5T	\$1,838,810
High Does Rate Unit	\$220,000
Anesthesia Machine	\$120,000
Sterilizer	\$100,000
Washer	\$100,000
Operating Room Lights	\$95,000
Operating Room Table	\$55,000

C: Economic Feasibility (1)(d)
Documentation of Construction
Cost Estimate

November 11, 2013

Mr. Erich Mounce
Chief Executive Officer
West Cancer Center
100 Humphreys Blvd.
Memphis, TN 38120

RE: VERIFICATION OF CONSTRUCTION COST ESTIMATE –
WEST CANCER CENTER, MEMPHIS, TENNESSEE

Dear Mr. Mounce:

We have reviewed the construction cost estimates and descriptions for the project in the CON packet and compared them to typical construction costs we have experienced in the Mid South region for healthcare construction.

It is brg3s's opinion, that in today's dollar the projected \$19.2 million construction budget is consistent with the cost value for this type of construction and similar projects in this market. The budget includes \$15.7 million for construction, \$0.48 million for site work, \$1.5 million design/A&E fees and \$1.6 million for contingency. While specific finish choices and market conditions can greatly affect the cost of any project, the costs assumed in the estimate appear adequate for mid range finishes used in a healthcare environment for the scope of work for the West Cancer Center.

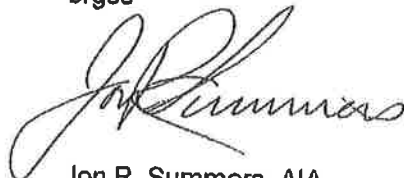
In providing opinions of probable construction cost, the Client understands the Consultant has no control over the cost or availability of labor, equipment or material, or over market conditions or the Contractor's method of pricing and that the Consultant's opinions of probable construction costs are made on the basis of the Consultants professional judgment and experience. The consultant makes no warranty, express or implied, that the bids or the negotiated cost of the work will not vary from the Consultant's opinion of probable construction cost.

This facility includes PET Scanner, MRI, CT and Linear Accelerators and will be designed in accordance with all applicable federal and state standards, regulations and guidelines, licensing agency requirements and with equipment manufacturer's specifications at the proposed location of the West Cancer Center, Wolf River Blvd., Germantown, TN.

Please do not hesitate to contact us if you require any additional information.

Sincerely,

brg3s



Jon R. Summers, AIA
Principal

11 W. Huling Avenue
Memphis, Tennessee 38103
t 901.260.9600
f 901.531.8042
w brg3s.com

brg3s

C: Economic Feasibility (2)
Documentation of
Availability of Funding



November 7, 2013

Melanie Hill
Executive Director
Tennessee Health Facilities Commission
Andrew Jackson State Office Building
500 Deaderick Street, Suite 850
Nashville, TN 37243

Dear Ms. Hill:

This is to certify that Methodist Healthcare – Memphis Hospitals has adequate financial resources for the Methodist Healthcare – Memphis Hospitals WEST CANCER CENTER project. The applicant, Methodist Healthcare–Memphis Hospitals, is a not-for-profit corporation that operates five Shelby County hospitals under a single license. The applicant is a wholly-owned subsidiary of a broader parent organization, Methodist Healthcare, which is a not-for-profit corporation with ownership and operating interests in multiple other healthcare facilities of several types in West Tennessee and North Mississippi. Cash is held at the corporate level. Methodist Healthcare has available cash balances to commit to this project. The capital cost of the project is estimated at \$60,554,193.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris McLean". The signature is fluid and cursive, with the first name "Chris" and last name "McLean" clearly distinguishable.

Chris McLean
Senior Vice President Finance

C: Economic Feasibility (4)
Detail of Other Revenue and Expense

Defining "Other" categories**Other Operating Revenue:**

Cafeteria
 Drugs
 Telephone rental
 Vending
 Office Rental
 Ground Transportation
 Fix Wing
 Grants
 United Way Grants
 Misc. Income

Other Expenses:

Benefits
 Repairs and Maintenance
 Professional Fees
 Contract Services
 Accounting/Auditing Fees
 Legal/Consulting Fee
 Advertising
 Dues and Subscriptions
 Education/ Travel
 Utilities
 Insurance
 Food services
 Laundry Services
 Print Shop
 Telephone
 Transcription
 Academic Support
 Contributions
 License/Accreditations Fees
 Postage/Freight
 Procurement Card Exp

Other Revenue/Expenses:

Capital Campaign Funding
 Interest Income
 Gain/Loss on Disposal of PPE

Project Data Chart**Other Operating Revenue:**

Cafeteria
 Drugs
 Gift Shop
 Telephone
 Vending
 Shared Svc
 Tuition/Student Fees
 Office Rentals
 Parking
 340b Program
 HealthSouth
 Trauma Fund
 Rental Income
 Transp (ground & fixed wing)
 Gamma Knife
 Grants
 Other

C: Economic Feasibility (10)

Financial Statements

Methodist Le Bonheur Healthcare
Balance Sheet
September 2013
(in thousands)

Economic Feasibility Study 10

ASSETS:	
CURRENT ASSETS:	
CASH & TEMPORARY INVESTMENTS:	
UNRESTRICTED	787,315
RESTRICTED	14,523
TOTAL CASH & TEMPORARY INVESTMENTS	801,838
ACCOUNTS RECEIVABLE:	
PATIENT	725,690
ALLOW DBTFUL ACCTS & CONTR ADJ	518,371
NET PATIENT ACCOUNTS RECEIVABLE	207,319
MEDICARE / MEDICAID PROGRAMS	-
AFFILIATES	-
PLEDGE CAMPAIGN	2,602
OTHER	15,403
TOTAL ACCOUNTS RECEIVABLE	225,324
INVENTORIES	24,500
PREPAID EXP & OTHER CURRENT ASSETS	9,397
ASSETS LIMITED TO USE-CURRENT PORTION	891
TOTAL CURRENT ASSETS	1,061,950
ASSETS LIMIT TO USE-LESS CURR PORTION	39,611
PROPERTY PLANT & EQUIPMENT-NET	876,763
UNAMORTIZED DEBT ISSUE COSTS	12,933
SWAPS MARKET VALUE	0
ADVANCES TO AFFILIATES	0
PLEDGE CAMPAIGN-LONG TERM	3,959
OTHER ASSETS	40,501
TOTAL ASSETS	2,035,717
LIABILITIES AND NET ASSETS:	
CURRENT LIABILITIES:	
ACCOUNTS PAYABLE	80,704
ACCRUED PAYROLL & PAYROLL TAXES	22,048
ACCRUED PTO	33,856
ACCRUED SELF INSURANCE COSTS	19,373
ACCRUED INTEREST	4,323
OTHER ACCRUED EXPENSES	5,900
MEDICARE / MEDICAID PROGRAMS	7777
AFFILIATES	0
LONG TERM DEBT-CURRENT PORTION	15676
TOTAL CURRENT LIABILITIES	169,857
LONG TERM DEBT LESS CURRENT PORTION	584,805
ACCRUED PENSION LIABILITY	186,136
HPL LONG TERM RESERVE	18,658
SWAPS MARKET VALUE	55,792
OTHER LONG TERM LIABILITIES	6,466
ADVANCES FROM AFFILIATES	0
MINORITY INTEREST	4,604
TOTAL LIABILITIES	1,028,118
NET ASSETS:	
UNRESTRICTED	987,689
TEMPORARILY RESTRICTED	18,482
PERMANENTLY RESTRICTED	3,428
TOTAL NET ASSETS	1,009,599
TOTAL LIABILITIES AND NET ASSETS	2,035,717

Methodist Healthcare – Memphis Hospitals
Income Statement
Period Ended September 2013
(\$000's)

Economic Feasibility - 10

Revenues

Gross patient service revenues	\$ 3,868,386
Deductions from revenue	<u>2,824,440</u>
Net patient service revenues	1,043,946
Other Operating Revenue	31,782
Other Non-Operating Revenue	886
Total revenues	1,076,614

Expenses

Salaries and benefits	419,043
Supplies and other	518,416
Depreciation and amortization	54,791
Interest	<u>(2,416)</u>
Total expenses	989,834

Net Income	\$ <u><u>86,780</u></u>
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METHODIST LE BONHEUR HEALTHCARE AND AFFILIATES

Combined Financial Statements

December 31, 2012 and 2011

(With Independent Auditors' Report Thereon)



KPMG LLP
Suite 900
50 North Front Street
Memphis, TN 38103-1194

Independent Auditors' Report

The Board of Directors
Methodist Le Bonheur Healthcare:

Report on the Financial Statements

We have audited the accompanying combined financial statements of Methodist Le Bonheur Healthcare and Affiliates (the System), which comprise the combined balance sheets as of December 31, 2012 and 2011, and the related combined statements of operations, changes in net assets, and cash flows for the years then ended, and the related notes to the combined financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these combined financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combined financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these combined financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combined financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combined financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the combined financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the combined financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combined financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the combined financial statements referred to above present fairly in all material respects, the financial position of Methodist Le Bonheur Healthcare and Affiliates as of December 31, 2012 and 2011, and the results of their operations and their cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.



Memphis, Tennessee
April 26, 2013

METHODIST LE BONHEUR HEALTHCARE AND AFFILIATES**Combined Balance Sheets****December 31, 2012 and 2011****(In thousands)**

Assets	2012	2011
Current assets:		
Cash and cash equivalents	\$ 71,677	71,558
Investments	746,608	569,779
Net patient accounts receivable	190,102	170,705
Due from third-party payors	—	523
Other current assets	49,373	45,013
Assets limited as to use – current portion	682	897
Total current assets	1,058,442	858,475
Assets limited as to use, less current portion	40,616	40,754
Property and equipment, net	821,718	808,006
Other assets	54,956	58,613
Total assets	\$ 1,975,732	1,765,848
Liabilities and Net Assets		
Current liabilities:		
Accounts payable	\$ 57,829	58,581
Accrued expenses and other current liabilities	91,583	85,280
Due to third-party payors	17,903	—
Long-term debt – current portion	15,658	18,849
Total current liabilities	182,973	162,710
Long-term debt, less current portion	600,833	515,322
Estimated professional and general liability costs	25,081	25,392
Accrued pension cost	197,608	190,519
Other long-term liabilities	88,743	92,448
Total liabilities	1,095,238	986,391
Net assets:		
Unrestricted	852,139	751,126
Temporarily restricted	20,282	20,081
Permanently restricted	3,351	3,004
Total net assets attributable to Methodist Le Bonheur Healthcare	875,772	774,211
Noncontrolling interests	4,722	5,246
Total net assets	880,494	779,457
Commitments and contingencies		
Total liabilities and net assets	\$ 1,975,732	1,765,848

See accompanying notes to combined financial statements.

METHODIST LE BONHEUR HEALTHCARE AND AFFILIATES**Combined Statements of Operations****Years ended December 31, 2012 and 2011****(In thousands)**

	<u>2012</u>	<u>2011</u>
Unrestricted revenues and other support:		
Net patient service revenue	\$ 1,562,285	1,356,646
Provision for uncollectible accounts	(135,201)	(109,570)
Net patient service revenue less provision for uncollectible accounts	1,427,084	1,247,076
Other revenue	55,200	30,639
Net assets released from restrictions used for operations	13,012	9,055
Total unrestricted revenues and other support	<u>1,495,296</u>	<u>1,286,770</u>
Expenses:		
Salaries and benefits	724,897	662,305
Supplies and other	599,393	473,492
Depreciation and amortization	85,345	85,282
Interest	27,287	25,586
Total expenses	<u>1,436,922</u>	<u>1,246,665</u>
Operating income	<u>58,374</u>	<u>40,105</u>
Nonoperating gains (losses):		
Investment income, net	24,012	36,271
Change in fair value of interest rate swaps	3,798	(38,084)
Unrealized gain (loss) on trading securities, net	37,984	(27,261)
Impairment of land	(332)	—
Impairment of goodwill	(928)	(3,800)
Total nonoperating gains (losses), net	<u>64,534</u>	<u>(32,874)</u>
Revenues, gains and other support in excess of expenses and losses, before noncontrolling interests	122,908	7,231
Noncontrolling interests	<u>(1,424)</u>	<u>(382)</u>
Revenues, gains and other support in excess of expenses and losses	121,484	6,849
Other changes in unrestricted net assets:		
Accrued pension cost adjustments	(22,289)	(85,813)
Other	(68)	—
Net assets released from restrictions used for capital purposes	1,886	2,895
Increase (decrease) in unrestricted net assets	<u>\$ 101,013</u>	<u>(76,069)</u>

See accompanying notes to combined financial statements.

METHODIST LE BONHEUR HEALTHCARE AND AFFILIATES

Combined Statements of Changes in Net Assets

Years ended December 31, 2012 and 2011

(In thousands)

	Unrestricted	Temporarily restricted	Permanently restricted	Noncontrolling interests	Total
Balances at December 31, 2010	\$ 827,195	22,743	2,840	7,068	859,846
Revenues, gains and other support in excess of expenses and losses	6,849	—	—	382	7,231
Distributions to minority shareholders	—	—	—	(2,204)	(2,204)
Accrued pension cost adjustments	(85,813)	—	—	—	(85,813)
Donor-restricted gifts, grants, and bequests	—	9,116	164	—	9,280
Investment income, net	—	172	—	—	172
Net assets released from restrictions used for operations	—	(9,055)	—	—	(9,055)
Net assets released from restrictions used for capital purposes	2,895	(2,895)	—	—	—
Change in net assets	(76,069)	(2,662)	164	(1,822)	(80,389)
Balances at December 31, 2011	751,126	20,081	3,004	5,246	779,457
Revenues, gains and other support in excess of expenses and losses	121,484	—	—	1,424	122,908
Distributions to minority shareholders	—	—	—	(1,948)	(1,948)
Accrued pension cost adjustments	(22,289)	—	—	—	(22,289)
Other	(68)	—	—	—	(68)
Donor-restricted gifts, grants, and bequests	—	14,502	347	—	14,849
Investment income, net	—	597	—	—	597
Net assets released from restrictions used for operations	—	(13,012)	—	—	(13,012)
Net assets released from restrictions used for capital purposes	1,886	(1,886)	—	—	—
Change in net assets	101,013	201	347	(524)	101,037
Balances at December 31, 2012	\$ 852,139	20,282	3,351	4,722	880,494

See accompanying notes to combined financial statements.

METHODIST LE BONHEUR HEALTHCARE AND AFFILIATES

Combined Statements of Cash Flows
Years ended December 31, 2012 and 2011
(In thousands)

	<u>2012</u>	<u>2011</u>
Cash flows from operating activities:		
Change in net assets		
Adjustments to reconcile change in net assets to net cash provided by operating activities, net of effects of acquisitions:	\$ 101,037	(80,389)
Depreciation and amortization	85,345	85,282
Unrealized (gain) loss on trading securities, net	(37,984)	27,261
Change in fair value of interest rate swaps	(3,798)	38,084
Provision for uncollectible accounts	135,201	109,570
Restricted contributions and investment income	(1,117)	(1,184)
Equity in net income of equity investees	1,401	(163)
Impairment of land	332	—
Impairment of goodwill	928	3,800
Gain on disposal of property and equipment	(70)	(99)
Accrued pension cost adjustments	22,289	85,813
Changes in operating assets and liabilities:		
Accounts receivable		
Other current assets and due from third-party payors	(154,598)	(112,742)
Other assets	(3,835)	(4,056)
Accounts payable, accrued expenses and due to third-party payors	1,336	(3,534)
Other long-term liabilities, estimated professional and general liability costs and accrued pension costs	23,454	(7,445)
	<u>(15,418)</u>	<u>(31,315)</u>
Net cash provided by operating activities	<u>154,503</u>	<u>108,883</u>
Cash flows from investing activities:		
Capital expenditures	(98,812)	(73,344)
Proceeds from sales of property and equipment	253	561
Sales of investments	1,665,243	1,237,632
Purchases of investments	(1,803,922)	(1,269,685)
Change in assets limited as to use	237	(187)
Purchase of businesses	(74)	(2,389)
Net cash used in investing activities	<u>(237,075)</u>	<u>(107,412)</u>
Cash flows from financing activities:		
Proceeds from issuance of long-term debt	100,500	128
Repayment of long-term debt	(18,926)	(16,028)
Restricted contributions and investment income	1,117	1,184
Net cash provided by (used in) financing activities	<u>82,691</u>	<u>(14,716)</u>
Net increase (decrease) in cash and cash equivalents	<u>119</u>	<u>(13,245)</u>
Cash and cash equivalents at beginning of year	<u>71,558</u>	<u>84,803</u>
Cash and cash equivalents at end of year	<u>\$ 71,677</u>	<u>71,558</u>

See accompanying notes to combined financial statements.

**C: Orderly Development (7)(d)(1)
TDH Licensure Survey and
Plan of Correction**

FEB - 4 2008



STATE OF TENNESSEE
DEPARTMENT OF HEALTH
WEST TENNESSEE HEALTH CARE FACILITIES
781-B AIRWAYS BOULEVARD
JACKSON, TENNESSEE 38301-3203

January 29, 2008

Ms. Peggy Troy, Administrator
Methodist Healthcare Memphis Hospitals
1211 Union Avenue, Ste 700
Memphis, TN 38104

RE: Licensure Surveys

Dear Ms. Troy:

Enclosed is the statement of deficiencies for the licensure surveys completed at your facility on **January 17, 2008**. Based upon 1200-8-1, you are asked to submit an acceptable plan of correction for achieving compliance with completion dates and signature within **ten (10) days from the date of this letter**.

Please address each deficiency separately with positive and specific statements advising this office of a plan of correction that includes acceptable time schedule, which will lead to the correction of the cited deficiencies. **Enter on the right side of the State Form, opposite the deficiencies**, your planned action to correct the deficiencies and the expected completion date. The completion date can be no longer than **45 days from the day of survey**. Before the plan can be considered "acceptable," it must be signed and dated by the administrator

Your plan of correction must contain the following:

- How the deficiency will be corrected;
- How the facility will prevent the same deficiency from recurring.
- The date the deficiency will be corrected;
- How ongoing compliance will be monitored.

Please be advised that under the disclosure of survey information provisions, the Statement of Deficiencies will be available to the public.

If assistance is needed, please feel free to call me at 731-421-5113.

Sincerely,

A handwritten signature in cursive script, appearing to read "Celia Skelley".

Celia Skelley, MSN, RN
Public Health Consultant Nurse 2

CS/TW

STATEMENT OF DEFICIENCIES AND PLAN OF CORRECTION		(X1) PROVIDER/SUPPLIER/CLIA IDENTIFICATION NUMBER: TNP531109	39 (X2) MULTIPLE CONSTRUCTION A. BUILDING 03 - METHODIST NORTH BUIL B. WING _____	(X3) DATE SURVEY COMPLETED 01/16/2008
NAME OF PROVIDER OR SUPPLIER METHODIST HEALTHCARE MEMPHIS HOSPIT		STREET ADDRESS, CITY, STATE, ZIP CODE 1265 UNION AVE SUITE 700 MEMPHIS, TN 38104		
(X4) ID PREFIX TAG	SUMMARY STATEMENT OF DEFICIENCIES (EACH DEFICIENCY MUST BE PRECEDED BY FULL REGULATORY OR LSC IDENTIFYING INFORMATION)	ID PREFIX TAG	PROVIDER'S PLAN OF CORRECTION (EACH CORRECTIVE ACTION SHOULD BE CROSS-REFERENCED TO THE APPROPRIATE DEFICIENCY)	(X5) COMPLETE DATE
H 871	<p>1200-8-1-.08 (1) Building Standards</p> <p>(1) The hospital must be constructed, arranged, and maintained to ensure the safety of the patient.</p> <p>This Rule is not met as evidenced by: Methodist North</p> <p>Based on observation, it was determined that the facility failed to maintain all parts of the building.</p> <p>The findings included;</p> <p>On 1/16/08 these items were found during the tour of the building:</p> <p>a. On the 5th floor a sprinkler head defector was found bent by room 511 in the corridor.</p> <p>b. On the 4th floor the oxygen storage room door would not close and latch.</p> <p>c. On the 3rd floor a penetration was found around the duct above the ceiling by room 308.</p> <p>d. On the 2nd floor at the entrance of the Cath lab by the elevators the hand rail had came lose from the wall.</p> <p>e. On the 2nd floor the fire doors(2-FD-222) at the entrance of the Cath Lab did not close and latch.</p> <p>f. On the 2nd floor at the Cardiac Short Stay a hole in the wall was found behind the fire door.</p> <p>g. On the 1st floor in the O R Preop holding, storage was being stored in the patient holding areas.</p> <p>h. In the Newborn Instension Care has 2 of 3 Emergency lights that did not work when tested.</p> <p>i. The door to the oxygen storage room (140) did not close and latch.</p> <p>j. The smoke detector outside the Dialysis room is approximately 12 inches from the supply vent from the air conditioner.</p>	H 871	<p>Building Standards</p> <p>a. Sprinkler head was repaired. A full inspection of corridor sprinkler heads was completed on 02/06/2008 with findings of 7 bent heads from a total of 278 inspected. These sprinkler heads will be replaced by March 7th.</p> <p>b. Door latch was replaced. Random fire door inspections will continue to ensure that all fire doors are included in the program and not just those that are located in the hallways at fire barriers.</p> <p>c. Repaired penetration. We believe this to be an isolated occurrence as no other penetrations were found. Continue quarterly random penetration inspections and annual full building penetration inspections.</p> <p>d. Changed hand rail to wall guard. Will inspect elevator service lobbies for best application of wall guard versus hand rails and change as appropriate.</p> <p>e. Door latch was repaired on Continue random fire door inspections and ensure that all fire doors are included in the program.</p> <p>f. The hole in the wall has been repaired. This appeared to an isolated incident, which occurred very recently. An inspection of every set of fire doors that are held open found that this was the only door with an issue.</p>	<p>01/23/08</p> <p>01/17/08</p> <p>01/16/08</p> <p>01/22/08</p> <p>01/17/08</p> <p>01/18/08</p>

Division of Health Care Facilities

TITLE

(X6) DATE

LABORATORY DIRECTOR'S OR PROVIDER/SUPPLIER REPRESENTATIVE'S SIGNATURE

STATE FORM

8899

VQ4921

If continuation sheet 1 of 2

TNP531109

140

(X2) MULTIPLE CONSTRUCTION

A. BUILDING 03 - METHODIST NORTH BUILD

B. WING

(X3) DATE SURVEY COMPLETED

01/16/2008

NAME OF PROVIDER OR SUPPLIER

STREET ADDRESS, CITY, STATE, ZIP CODE

METHODIST HEALTHCARE MEMPHIS HOSPIT

**1265 UNION AVE SUITE 700
MEMPHIS, TN 38104**

(X4) ID
PREFIX
TAG

SUMMARY STATEMENT OF DEFICIENCIES
(EACH DEFICIENCY MUST BE PRECEDED BY FULL
REGULATORY OR LSC IDENTIFYING INFORMATION)

ID
 PREFIX
 TAG

**PROVIDER'S PLAN OF CORRECTION
(EACH CORRECTIVE ACTION SHOULD BE
CROSS-REFERENCED TO THE APPROPRIATE
DEFICIENCY)**

(X5)
COMPLETE
DATE

H 871

Continued From page 1

H 871

Continued from page 1

k. In the basement 3 tables, a screen and a small metal cart are sitting in the corridor of the medical records.

Methodist South, No Deficiencies

Methodist University Hospital, No Deficiencies

Methodist Grmantown Hospital, No Deficiencies

Methodist Behavioral Health Hospital, No Deficiencies

Methodist Lebonheur Childrens Hospital, No Deficiencies

g. Supplies were immediately removed during the survey.

Unannounced random inspections will be conducted and documented by Safety / Facilities Services at least monthly in this area to ensure compliance for the next 3 months. Any deficiencies will be immediately corrected and in-service training will be immediately provided to department personnel.

h. Emergency lights were replaced .
Testing of the battery powered lights will
occur on a monthly basis.

i. Door latch was replaced.
Continue random fire door inspections and ensure that all fire doors are included in the program and not just those that are located in the hallways at fire barriers.

j. Smoke detector was immediately moved on the day of the inspection, As we find smoke detectors within 3 feet of a supply / return diffusers, we will move them. We aware of this requirement for all new construction / renovations and will enforce compliance.

k. All items were immediately removed from the corridor during the inspection. Unannounced random inspections will be conducted and documented by Safety / Facilities Services at least monthly in this area to ensure compliance for the next 3 months. Any deficiencies will be immediately corrected and in-service training will be immediately provided to department personnel.

01/16/08

01/21/08

01/17008

01/16/08

01/16/08

6509

VQ4921

If continuation sheet 2 of 2

141

STATEMENT OF DEFICIENCIES AND PLAN OF CORRECTION		(X1) PROVIDER/SUPPLIER/CLIA IDENTIFICATION NUMBER: TNP531109	(X2) MULTIPLE CONSTRUCTION A. BUILDING _____ B. WING _____	(X3) DATE SURVEY COMPLETED 01/17/2008
NAME OF PROVIDER OR SUPPLIER METHODIST HEALTHCARE MEMPHIS HOSPIT		STREET ADDRESS, CITY, STATE, ZIP CODE 1265 UNION AVE SUITE 700 MEMPHIS, TN 38104		
(X4) ID PREFIX TAG	SUMMARY STATEMENT OF DEFICIENCIES (EACH DEFICIENCY MUST BE PRECEDED BY FULL REGULATORY OR LSC IDENTIFYING INFORMATION)	ID PREFIX TAG	PROVIDER'S PLAN OF CORRECTION (EACH CORRECTIVE ACTION SHOULD BE CROSS-REFERENCED TO THE APPROPRIATE DEFICIENCY)	(X5) COMPLETE DATE
H 732	<p>1200-8-1-.06 (9)(b) Basic Hospital Functions</p> <p>(9) Food and Dietetic Services.</p> <p>(b) The hospital must designate a person to serve as the food and dietetic services director with responsibility for the daily management of the dietary services. The food and dietetic services director shall be:</p> <ol style="list-style-type: none"> 1. A dietitian; or 2. A graduate of a dietetic technician or dietetic assistant training program, correspondence or classroom, approved by the American Dietetic Association; or 3. A graduate of a state-approved course that provided ninety (90) or more hours of classroom instruction in food service supervision and has experience as a food service supervisor in a health care institution with consultation from a qualified dietitian. <p>This Rule is not met as evidenced by: Based on review of the hospital's food service contract, of licensure regulations, of personnel files and interviews it was determined the facility failed to meet licensure qualification requirements for 3 of 5 facility Food Service Directors (Facility # 1, 2, and 3) under the hospital license and to follow these State Hospital Regulations.</p> <p>The findings included:</p> <ol style="list-style-type: none"> 1. Review of the hospital contract for dietary services revealed the following documentation under Article 4 - Compliance with laws: "4.1 Compliance. [The food service contract 	H 732	<p>Basic Hospital Functions</p> <p>Qualified Interim Food and Nutrition Services Director has been named for Methodist Le Bonheur Children's Medical Center, Methodist North Hospital and Methodist South Hospital.</p> <p>The Food and Nutrition Services Director job description has been revised to require one of the following:</p> <ol style="list-style-type: none"> 1) a dietitian; or 2) a graduate of a dietetic technician or dietetic assistant training program, correspondence or classroom, approved by the American Dietetic Association; or 3) a graduate of a state-approved course that provided ninety (90) or more hours of classroom instruction in food service supervision and has experience as a food service supervisor in a health care institution with consultation from a qualified dietitian. <p>Food and Nutrition Services Director positions have been posted and recruitment will continue to permanently fill the positions.</p>	02/29/08

Division of Health Care Facilities

LABORATORY DIRECTOR'S OR PROVIDER/SUPPLIER REPRESENTATIVE'S SIGNATURE

TITLE

(X6) DATE

DATE FORM

6899

OL3Y11

If continuation sheet 1 of 2

STATEMENT OF DEFICIENCIES AND PLAN OF CORRECTION		(X1) PROVIDER/SUPPLIER/CLIA IDENTIFICATION NUMBER: TNP531109	42 (X2) MULTIPLE CONSTRUCTION A. BUILDING _____ B. WING _____		(X3) DATE SURVEY COMPLETED 01/17/2008
NAME OF PROVIDER OR SUPPLIER METHODIST HEALTHCARE MEMPHIS HOSPIT			STREET ADDRESS, CITY, STATE, ZIP CODE 1265 UNION AVE SUITE 700 MEMPHIS, TN 38104		
(X4) ID PREFIX TAG	SUMMARY STATEMENT OF DEFICIENCIES (EACH DEFICIENCY MUST BE PRECEDED BY FULL REGULATORY OR LSC IDENTIFYING INFORMATION)	ID PREFIX TAG	PROVIDER'S PLAN OF CORRECTION (EACH CORRECTIVE ACTION SHOULD BE CROSS-REFERENCED TO THE APPROPRIATE DEFICIENCY)	(X5) COMPLETE DATE	
H 732	<p>Continued From page 1</p> <p>company] and the System agree to comply with all applicable laws, rules and regulations".</p> <p>2. Review of personnel files for the Food Services Directors at Facilities 1, 2 and 3, failed to show they met the licensure regulations for a food service director.</p> <p>During an interview on 1/14/08, at 10:30 AM, the Food Service Director for Facility #1 confirmed he/she did not have the qualifications to meet the licensure regulation.</p> <p>During an interview on 1/15/08, at 9:30 AM, the Food Service Director for Facility #2 confirmed he/she did not have the qualifications to meet the licensure regulation.</p> <p>During an interview on 1/16/08, at 1:30 PM, the Hospital Clinical Risk Management Director was unable to provide documentation that the Food Service Directors from Facility 1, 2 or 3 met these Licensure Regulations.</p>	H 732	<p>Continued from page 1</p> <p>A check off sheet will be utilized to ensure that before an individual is offered a position as Food and Nutrition Director at any facility in Methodist Le Bonheur Healthcare, the above qualifications are met and one of the following is provided to the HR Recruiter and/or Regional Director of Operations:</p> <ol style="list-style-type: none"> 1) Copy of CDR Registered Dietitian card, or 2) Copy of CDR Registered Dietetic Technician card, or 3) Copy of certificate of graduation from a state approved CDM class. <p>There will be three (3) required levels of approval for each candidate that is chosen for the food and dietetic services director position at Methodist Le Bonheur Healthcare:</p> <ol style="list-style-type: none"> 1) Regional Director of Operations with Morrison 2) Regional Vice President with Morrison 3) Methodist Le Bonheur Healthcare Facility Administrative Liaison or the Methodist Le Bonheur Healthcare Facility Human Resource Director. <p>The dietary department will be included in the quarterly Human Resource Department audit. The facility liaison Director at each facility will review the personnel files on an annual basis and at time of new hire.</p>		

Division of Health Care Facilities
STATE FORM

6839

0L3Y11

If continuation sheet 2 of 2

C: Orderly Development (7)(d)(2)
Joint Commission Accreditation and
Survey Summary

Methodist Healthcare Memphis Hospitals Memphis, TN

has been Accredited by



The Joint Commission

Which has surveyed this organization and found it to meet the requirements for the

Hospital Accreditation Program

April 20, 2013

Accreditation is customarily valid for up to 36 months.

Rebecca J. Patchin MD

Rebecca J. Patchin, MD.
Chair, Board of Commissioners

Organization ID #: 7874
Print/Reprint Date: 06/19/13

Mark R. Chassin

Mark R. Chassin, MD, FACP, MPP, MPH
President

The Joint Commission is an independent, not-for-profit, national body that oversees the safety and quality of health care and other services provided in accredited organizations. Information about accredited organizations may be provided directly to The Joint Commission at 1-800-994-6610. Information regarding accreditation and the accreditation performance of individual organizations can be obtained through The Joint Commission's web site at www.jointcommission.org.



This reproduction of the original accreditation certificate has been issued for use in regulatory/payer agency verification of accreditation by The Joint Commission. Please consult Quality Check on The Joint Commission's website to confirm the organization's current accreditation status and for a listing of the organization's locations of care.

June 11, 2013

Re: # 7874
CCN: #440049
Program: Hospital
Accreditation Expiration Date: April 20, 2016

Gary S. Shorb
President/CEO
Methodist Healthcare Memphis Hospitals
1211 Union Avenue
Memphis, Tennessee 38104

Dear Mr. Shorb:

This letter confirms that your April 15, 2013 - April 19, 2013 unannounced full resurvey was conducted for the purposes of assessing compliance with the Medicare conditions for hospitals through The Joint Commission's deemed status survey process.

Based upon the submission of your evidence of standards compliance on June 03, 2013 and June 04, 2013, the areas of deficiency listed below have been removed. The Joint Commission is granting your organization an accreditation decision of Accredited with an effective date of April 20, 2013. We congratulate you on your effective resolution of these deficiencies.

§482.11 Compliance with Federal, State and Local Laws
§482.13 Patient's Rights
§482.25 Pharmaceutical Services
§482.41 Physical Environment
§482.51 Surgical Services

The Joint Commission is also recommending your organization for continued Medicare certification effective April 20, 2013. Please note that the Centers for Medicare and Medicaid Services (CMS) Regional Office (RO) makes the final determination regarding your Medicare participation and the effective date of participation in accordance with the regulations at 42 CFR 489.13. Your organization is encouraged to share a copy of this Medicare recommendation letter with your State Survey Agency.

This recommendation applies to the following location(s):

Breast Diagnostic Center - Germantown
7945 Wolf River Blvd., Germantown, TN, 38138

Cardiovascular Outpatient Diagnostic Center
7460 Wolf River Blvd., Germantown, TN, 38138

www.jointcommission.org

Headquarters
One Renaissance Boulevard
Oakbrook Terrace, IL 60181
630 792 5000 Voice

Le Bonheur Children's Hospital
848 Adams, Memphis, TN, 38103

Le Bonheur Children's Hospital Audiology
7945 Wolf River Blvd., Germantown, TN, 38138

Le Bonheur Cordova Urgent Care
8035 Club Parkway, Cordova, TN, 38018

Le Bonheur East Diagnostic Center
806 Estate Place, Memphis, TN, 38120

Le Bonheur Urgent Care at Hacks Cross
8071 Winchester Rd., Ste. 2, Memphis, TN, 38125

Le Bonheur Urgent Care East
806 Estate Place, Memphis, TN, 38120

Methodist Comprehensive Wound Healing Center
1251 Wesley Drive, Suite 107, Memphis, TN, 38116

Methodist Diagnostic Center Germantown
1377 South Germantown Rd., Germantown, TN, 38138

Methodist Germantown Radiation Oncology Center
1381 South Germantown Rd., Germantown, TN, 38138

Methodist Healthcare Outpatient Services
100 North Humphreys Blvd., Memphis, TN, 38120

Methodist Healthcare Outpatient Services
1588 Union, Memphis, TN, 38104

Methodist Healthcare Outpatient Services
240 Grandview Drive, Brighton, TN, 38011

Methodist Le Bonheur Germantown Hospital
7691 Poplar Avenue, Germantown, TN, 38138

Methodist North Hospital
3960 New Covington Pike, Memphis, TN, 38128

Methodist Sleep Disorders Center
5050 Poplar Suite 300, Memphis, TN, 38114

www.jointcommission.org

Headquarters
One Renaissance Boulevard
Oakbrook Terrace, IL 60181
630 792 5000 Voice

Methodist South Hospital
1300 Wesley Drive, Memphis, TN, 38116

Methodist University Hospital
1265 Union Avenue, Memphis, TN, 38104

MHMH GI Lab - Southwind
3725 Champion Hills Drive, Memphis, TN, 38125

Midtown Diagnostic Center
1801 Union Ave, Memphis, TN, 38104

North Comprehensive Wound Healing Center
3950 New Covington Pike, Memphis, TN, 38128

We direct your attention to some important Joint Commission policies. First, your Medicare report is publicly accessible as required by the Joint Commission's agreement with the Centers for Medicare and Medicaid Services. Second, Joint Commission policy requires that you inform us of any changes in the name or ownership of your organization, or health care services you provide.

Sincerely,



Mark G. Pelletier, RN, MS
Chief Operating Officer
Division of Accreditation and Certification Operations

cc: CMS/Central Office/Survey & Certification Group/Division of Acute Care Services
CMS/Regional Office 4 /Survey and Certification Staff

C: Proof of Publication

Legal Notices
General 526Legal Notices
General 526Legal Notices
General 526Legal Notices
General 526Legal Notices
General 526

SUBSTITUTE TRUSTEE'S

NOTIFICATION OF INTENT TO APPLY FOR
A CERTIFICATE OF NEED

This is to provide official notice to the Health Services and Development Agency and all interested parties in accordance with T.C.A. § 68-11-1601 et seq. and the Rules of the Health Services and Development Agency, that Methodist Healthcare - Memphis Hospitals (a general hospital), owned and managed by Methodist Healthcare - Memphis Hospitals (a not-for-profit corporation), intends to file an application for a Certificate of Need to establish a comprehensive cancer center, to relocate linear accelerator, positron emission tomography/computed tomography (PET/CT), magnetic resonance imaging (MRI) and computed tomography (CT) services and equipment to replace the MRI equipment to acquire an additional linear accelerator and to establish ambulatory operating rooms. The facility will be located at 7945 Wolf River Boulevard, Germantown, TN 38138 and will be operated as an outpatient department of Methodist Healthcare - Memphis Hospital under the name WEST CANCER CENTER. The project includes a full array of cancer services and programs. The project involves approximately 2,050 square feet of new space and 191,235 of renovated space. This project does not involve inpatient beds or other services for which a certificate of need is required. The estimated project costs are \$60,554,193.

The anticipated date of filing the application is on or before November 13, 2013. The contact person for this project is Carol Weldenhoffer, Corporate Director of Planning, Research and Business Development, who may be reached at Methodist Healthcare, 1407 Union Avenue, Suite 300, Memphis, TN 38104, 901-516-0670.

Upon written request by interested parties, a local fact-finding/public hearing shall be conducted. Written requests for hearing should be sent to:

Health Services and Development Agency
Andrew Jackson Building, 9th Floor
602 O'Quinn Street
Nashville, Tennessee 37243

Pursuant to T.C.A. § 68-11-1507(c)(1), (A) Any health care institution wishing to oppose a Certificate of Need application must file a written notice with the Health Services and Development Agency no later than fifteen (15) days before the regularly scheduled Health Services and Development Agency meeting at which the application is originally scheduled, and (B) Any other person wishing to oppose the application must file written objection with the Health Services and Development Agency at or prior to the consideration of the application by the Agency.

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AFFIDAVITSTATE OF TennesseeCOUNTY OF Shelby

Erich Mounce being first duly sworn, says that he/she is the applicant named in this application or his/her/its lawful agent, that this project will be completed in accordance with the application, that the applicant has read the directions to this application, the Rules of the Health Services and Development Agency, and T.C.A. § 68-11-1601, *et seq.*, and that the responses to this application or any other questions deemed appropriate by the Health Services and Development Agency are true and complete.

[Signature]
SIGNATURE/TITLE

Sworn to and subscribed before me this 7th day of November 2013 a Notary
(Month) (Year)

Public in and for the County/State of Shelby



Andrea Williams
NOTARY PUBLIC

My commission expires June 5th 2017
(Month/Day) (Year)

SUPPLEMENTAL - #1 -COPY-

Methodist Healthcare Memphis
Hospitals – West Cancer Center

CN1311-043

152
TRAUGER & TUKE
ATTORNEYS AT LAW
THE SOUTHERN TURF BUILDING
222 FOURTH AVENUE NORTH
NASHVILLE, TENNESSEE 37219-2117
TELEPHONE (615) 256-8585
TELECOPIER (615) 256-7444

SUPPLEMENTAL- # 1
November 25, 2013
11:00am

November 25, 2013

VIA HAND DELIVERY

Ms. Melanie Hill
Executive Director
Tennessee Health Services & Development Agency
502 Deaderick Street, 9th Floor
Nashville, TN 37243

RE: Response to Supplemental questions to Methodist Healthcare
Memphis Hospitals West Cancer Center
Certificate of Need – CN1311-043

Dear Ms. Hill:

Enclosed please find a Supplemental Response, in triplicate, to be filed on behalf of my client, Methodist Healthcare. Please date stamp the additional enclosed copy of the Response and return it to me.

Thank you for your assistance.

Very truly yours,



Byron R. Trauger

BRT/kmn

Enclosures

cc: Carol Weidenhoffer

**METHODIST HEALTHCARE –
MEMPHIS HOSPITALS**

SUPPLEMENTAL RESPONSE

CN1311-043

**THE WEST CANCER CENTER –
AN INTEGRATED COMPREHENSIVE
CANCER CENTER**

MEMPHIS, SHELBY COUNTY

Filed November 2013

1. Section A, (Applicant Profile) Item 1 (Name and Address of Applicant)

Your response is noted. All Certificates of Need are site specific. Please provide a revised first page of the application which accurately identifies the address of the building into which the proposed project will be located.

Please see Attachment 1 for the revised first page with the corrected address for this project. The address originally listed was the address for the Methodist Healthcare–Memphis Hospitals main hospital campus.

2. Section A, Applicant Profile, Item 4

Please provide a copy of the applicant's corporate charter from the Tennessee Secretary of State's web-site that indicates the Corporation (Not-for-profit) has an active status. The web-site address is
<https://tnbear.tn.gov/Ecommerce/FilingSearch.aspx>

Please see Attachment 2 for the document from the Tennessee Secretary of State's website showing Methodist Healthcare-Memphis Hospitals' active status.

3. Section A, (Applicant Profile) Item 6 (Control of the proposed Site)

Please provide referenced Attachment A:6 to demonstrate ownership of the proposed site.

Please see Attachment 3 for the Contract to Purchase demonstrating ownership of the proposed site.

4. Section A, (Applicant Profile) Item 13

The applicant is noted as participating in the Dual Complete (a Special Needs Plan). Please provide additional information regarding this plan and what type of members are enrolled.

The United Healthcare Special Needs plan is “a type of Medicare Advantage plan for people who receive both Medicare and Medicaid (also referred to as “dual eligible”).” The plan “combines all the benefits of Original Medicare (Part A and B) with prescription drug coverage (Part D).” “Many plans have \$0 to low monthly premium, beyond what you pay for Part B. Depending on the specific plan, benefits may also include care coordination, routine vision and dental coverage, credits to purchase everyday health items like vitamins, first aid supplies, and dental care products, and transportation to your medical appointments.” (source:
<https://www.uhcmedicareolutions.com/health-plans/special-needs.html>)

5. Section B, Project Description, Item 1

Please define “exurban areas”.

An exurban area is defined by dictionary.com as a small, usually prosperous, community situated beyond the suburbs of a city.

The combined average utilization of nine (9) LINAC units in the service area of 6,596 is noted. However, according to HSDA equipment registry data there appears to be eight (8) LINACs in Shelby County in 2012 excluding St. Jude Children’s Hospital. Please clarify.

The service area includes Shelby, Fayette and Tipton counties in Tennessee, DeSoto and Marshall counties in Mississippi and Crittenden County, Arkansas. There are ten LINACs in Shelby County; two of which are St. Jude Children’s Hospital’s and are excluded from the calculation as noted below. In 2012, the eight LINACs in Shelby County (excluding St. Jude) performed 49,213 procedures for an average per unit of 6,152 which is above the 6,000 threshold.

Yet, there was also one LINAC in DeSoto County in 2012 which is in the service area and was included in the original response. See the excerpt and table below from the originally filed application summarizing the nine units – eight in Shelby and one in DeSoto.

The combined average utilization of existing LINAC units in the service area is 5,527 in 2012. Yet, St. Jude Children’s Research Hospital is an internationally recognized pediatric hospital dedicated to research and treatment for children with cancer and other catastrophic diseases. St. Jude is caring for a unique population of patients. Excluding St. Jude’s volumes and equipment from the market calculation, the average for LINAC volumes per unit is 6,596 in 2012 which is well above the 6,000 threshold. See the table below for LINAC market utilization.

TABLE 1
METHODIST SERVICE AREA
LINEAR ACCELERATOR EQUIPMENT AND UTILIZATION, 2010-2012

Facility Type	Facility	2010		2011		2012	
		Procs	# of Units	Procs	# of Units	Procs	# of Units
HOSP	Methodist Healthcare	21,287	3	21,049	3	23,756	3
HOSP	Baptist Memorial Hospital-Memphis	10,989	3	11,343	3	11,052	2
ASTC	Baptist Memorial Hospital-Tipton/Germantown	7,365	1	5,270	1	7,610	1
HOSP	Regional Medical Center at Memphis (The Med) ¹	87	1	-	-	-	-
HOSP	St. Francis Hospital – Park	7,508	2	7,576	2	6,795	2
HOSP	St. Jude Children’s Research Hospital	5,789	2	4,800	2	1,437	2
HOSP	Baptist Memorial Hospital – DeSoto	7,152	1	7,187	1	10,152	1
Total Procedures		60,177	13	57,225	12	80,802	11
Average Procedures per Unit		4,629		4,769		5,527	
Total Procedures without St. Jude		53,388	11	52,425	10	59,365	9
Average Procedures per Unit without St. Jude		4,944		5,243		6,596	
Source: 2008-10 TN HSDA - State Equipment Registry; and 2009-2012 MS DOH - State Health Plan							
¹ The Regional Medical Center at Memphis closed Linear Accelerator Services in 2010							

The reference to significant racial disparities in cancer rates for Shelby County and surrounding counties is noted. Please cite the source for the following statements:

- **“Research shows that the black population tends to have higher occurrences of cancer as compared to whites, and blacks in the community die disproportionately from all cancer when compared to other races”.**

The racial disparities noted in the application are supported by national and regional cancer incidence and death rates. See the excerpts and tables below from the originally filed application documenting the statistics from the National Cancer Institute – Surveillance, Epidemiology and End Results Program (SEER) and State Profiles data.

The racial disparities in cancer rates for Shelby County and the surrounding communities are significant. Research shows that the black population tends to have higher occurrences of cancer as compared to whites. Given the high incidence of cancer in Shelby County, the differences between mortality rates by race were analyzed. The

blacks in the community die disproportionately from all cancers when compared to other races.

TABLE 2
NATIONAL AGE-ADJUSTED CANCER RATES, 2006-2010

Age at Diagnosis or Death	Age-Adjusted Incidence Rates			Age-Adjusted Death Rates		
	All Races	Whites	Blacks	All Races	Whites	Blacks
All ages	463.0	471.9	483.6	176.4	175.8	210.3
Under 65	224.2	228.1	244.2	56.1	54.8	76.0
65 and over	2,113.7	2,157.0	2,138.6	1,008.4	1,012.0	1,138.9

Source: National Cancer Institute - Surveillance, Epidemiology and End Results Program (SEER)

TABLE 3
CANCER INCIDENCE AND DEATH RATES, 2006-2010
METHODIST TENNESSEE SERVICE AREA

Region	Annual Incidence Rates			Death Rates		
	All Races	White (including Hispanic)	Black (including Hispanic)	All Races	White (including Hispanic)	Black (including Hispanic)
Shelby County, TN	461.9	448.4	472.3	210.3	176.9	259.3
Fayette County, TN	472.2	465.5	495.2	189.0	168.6	256.9
Tipton County, TN	494.4	492.6	473.3	223.9	221.7	232.3
Tennessee	469.9	468.8	472.6	199.1	194.3	244.1
United States	453.7	452.8	468.5	176.4	175.8	210.3

Source: National Cancer Institute – State Cancer Profiles 2006-2010

In further analyses, it was determined that death rates from breast cancer and lung/bronchus cancer were the highest cancer mortality rates for Shelby County (see tables 4 and 5). Again racial disparity is prevalent and significant for cancer mortality rates. Black women die from breast cancer and black men die from lung cancer at much higher rates than whites in Shelby County for the period measured. Furthermore, in a recent study conducted by Sinai Urban Health Institute, the Metropolitan Chicago Breast Cancer Task Force and Avon Foundation Cancer Crusade, Memphis was identified as the city with the largest disparity in breast cancer mortality rates between black and white women. There is a need for outreach, screening and education in the black communities to eliminate the disparities and reduce the number of deaths.

TABLE 4
ANNUAL BREAST CANCER DEATH RATES BY RACE, 2006-2010
METHODIST TENNESSEE SERVICE AREA

Region	Breast Cancer (Females)		
	Annual Death Rate per 100,000 All Races	Annual Death Rate per 100,000 White	Annual Death Rate per 100,000 Black
Shelby County, TN	30.0	21.0	41.7
Fayette County, TN	30.5	29.1	n/a
Tipton County, TN	22.4	19.3	n/a
Tennessee	23.3	21.6	35.4
United States	22.6	22.1	30.8
Source: National Cancer Institute - State Cancer Profiles, 2006-2010; Death Rates based on Bias-Adjusted Modeled Estimates			

TABLE 5
ANNUAL LUNG/BRONCHUS DEATH RATES BY RACE, 2006-2010
METHODIST TENNESSEE SERVICE AREA

Region	Lung/Bronchus (Females)			Lung/Bronchus (Males)		
	Annual Death Rate per 100,000 All Races	Annual Death Rate per 100,000 White	Annual Death Rate per 100,000 Black	Annual Death Rate per 100,000 All Races	Annual Death Rate per 100,000 White	Annual Death Rate per 100,000 Black
Shelby County	42.4	42.3	42.3	80.0	67.0	100.8
Fayette County	41.8	49.7	n/a	75.9	67.4	115.5
Tipton County	54.1	52.9	n/a	97.0	100.4	n/a
Tennessee	46.6	47.3	44.0	89.5	88.7	100.8
United States	39.2	40.4	37.2	63.5	63.2	78.5
Source: National Cancer Institute - State Cancer Profiles, 2006-2010; Annual Death Rates based on Bias-Adjusted Modeled Estimates						

The new comprehensive cancer center will, among other programs, provide staff, equipment and resources for an integrated breast cancer program. The Methodist mission ensures access to all community members including the uninsured and underinsured. The ability to evaluate through physician services, diagnose through advanced imaging and treat through infusion, radiation and surgery all in one site, regardless of ability to pay is a must in for the Mid-South.

- **“Memphis was identified as the city with the largest disparity in breast cancer mortality rates between black and white women”.**

See Attachment 4 for the breast cancer disparity study conducted by Sinai Urban Health Institute, the Metropolitan Chicago Breast Cancer Task Force and Avon Foundation Cancer Crusade showing Memphis having the largest racial disparity for breast cancer mortality. This study looked at breast cancer disparity between non-Hispanic white

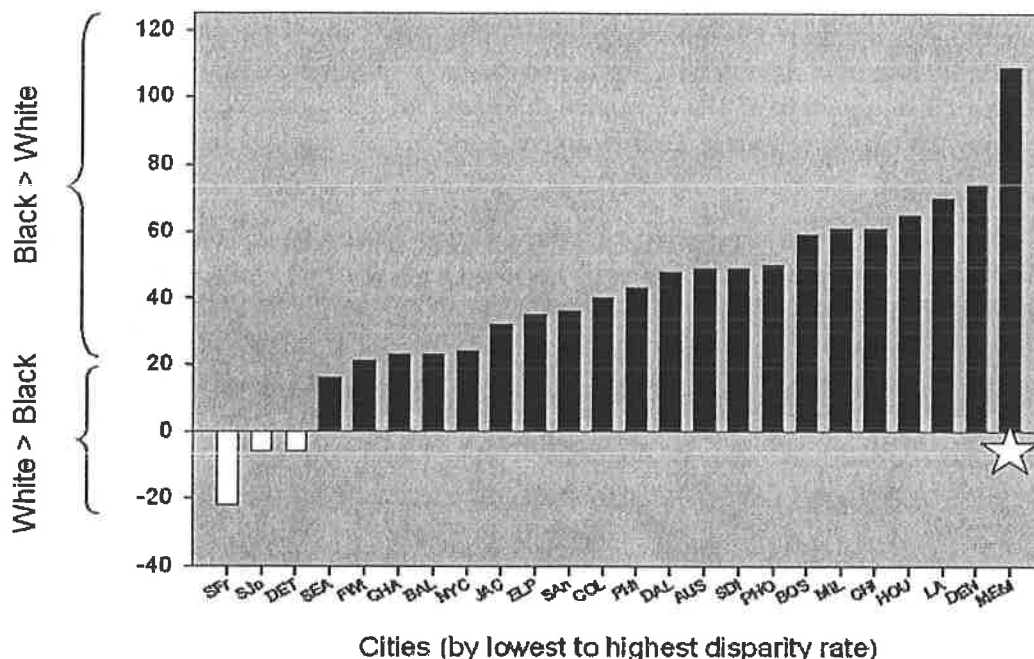
women (NHW) and non-Hispanic black (NHB) women in 25 of the largest US cities. Memphis had the highest noted disparity for the period studied (2005-2007) with a rates ratio of 2.09 as shown in Table 1 of the attached article. Tables from data in the study are shown below in Table 6 and 7 which demonstrate the significance of the disparity in Memphis as compared to other large cities. The rates ratio is the ratio of the age-adjusted mortality rate of NHB to NHW for breast cancer – meaning the mortality rate for NHB women is double that of NHW women in Memphis. This trend continues to plaque Shelby County as shown in Table 4 above.

TABLE 6
AGE-ADJUSTED BREAST CANCER DISPARITY MORTALITY
RATES BY RACE AND RATES RATIO, 2005-2007

City	NHB Rate	NHW Rate	Rates Ratio (NHB/NHW)
Memphis	44.6	21.3	2.09
Denver	30.8	17.7	1.74
Los Angeles	46.5	27.4	1.70
Houston	47.3	28.7	1.65
Chicago	37.8	23.4	1.62

Source: Attached Study – “The racial disparity in breast cancer mortality in the 25 largest cities in the United States”

TABLE 7
DISPARITY RATES IN BREAST CANCER MORTALITY RATES
BY CITY, 2005-2007



Source: Attached Study – “The racial disparity in breast cancer mortality in the 25 largest cities in the United States”

One of the biggest challenges for the breast cancer outreach program is transportation to so many different sites for care. The development of the integrated comprehensive cancer program will eliminate that challenge. Current breast cancer efforts are focused on the significant racial disparities. With non-Hispanic Black women comprising the majority of our female population over the age of 25, Memphis is uniquely positioned to study and address the significant racial disparity in the breast cancer mortality rates. Collaboration between Methodist, the West Clinic and the Methodist Congregational Health Network (a covenantal relationship among Methodist, over 500 Mid-South congregations and community health organizations) provide additional structures and a broader framework with which to evaluate these disparities. Grant dollars have been procured to establish patient navigators and examine the potential impact of the differences in screening and care pathways on mortality rates of these populations. The proposed integrated comprehensive center is a key initiative in Methodist's plans to reduce the disparity.

The applicant plans to consolidate multiple freestanding ambulatory sites into the proposed integrated comprehensive cancer center. Please clarify what the plan is for the space that will become empty at the former multiple freestanding ambulatory sites if this application is approved.

This project proposes to consolidate four Methodist ambulatory sites of care into one. The proposed site on Wolf River Boulevard already contains the Methodist Breast Central. The other sites are listed below.

- 1) The Methodist Radiation Oncology Center (less than a mile away from the project site on Germantown Parkway) houses a linear accelerator and CT simulator and provides a full array of radiation therapy services. This site is owned by Methodist. Approximately half of the building houses the Radiation Oncology Center and the other half houses the Methodist Germantown Outpatient Diagnostic Center. The vacated space will be evaluated for future expansion of Methodist's ambulatory presence in the eastern market.
- 2) The West Clinic on Humphreys Boulevard houses physician clinics, chemotherapy, IV infusion therapy, radiology (including MRI, CT, PET/CT, ultrasound and x-ray), interventional radiology, pharmacy, lab services, pain and palliative care and genetic, nutritional and psychological counseling services. The building is the proposed site for the new Le Bonheur Children's Hospitals' Pediatric Outpatient Center. The CON to establish the pediatric center is being filed simultaneously. Methodist, as good stewards of its resources, reviewed available space in the planning stages of the projects, looked for the most cost effective options and developed plans to redeploy assets versus building any new buildings.
- 3) The West Clinic's Comprehensive Breast Center (across the street from the project site on Wolf River Boulevard) houses three breast surgeons and provides complete breast care with digital screening and diagnostic mammography, sonography, percutaneous biopsy, genetic counseling, surgical therapy, chemotherapy and clinical research. This site is leased and the lease expires within six months of relocating the services.

It is noted the breast center will be located on the first floor. Currently, what type of services occupies the remaining three stories of the building that is slated to house the cancer center?

The proposed project site was designed for medical offices and multiple tenants. The first floor currently houses the Methodist Breast Centers as noted in addition to LapCorp (a specimen collection and processing service) and University of Tennessee Medical Group (UTMG) and University of Tennessee Methodist Physicians (UTMP) physician offices including medicine: internal medicine and sub-specialties, such as, allergy, endocrinology, nephrology, infectious disease, pulmonology and rheumatology. The second floor houses additional UTMG and UTMP practices including general and minimally invasive surgery, pediatric/adult otolaryngology, head and neck cancer surgery, ophthalmology, pediatric sub-specialties, surgical oncology, plastic surgery, gynecology/reproductive health and urology. The cancer services will relocate within the building upon completion of the West Cancer Center. The pediatric offices will relocate to the Le Bonheur Pediatric Outpatient Center, if approved in the same CON cycle (CN1311-042). The other healthcare providers are aware of the project and have plans upon approval to relocate within the same market.

What other cancer services will be available at other Methodist locations?

Methodist offers a full array of inpatient and outpatient cancer services. The integrated comprehensive model will consolidate multiple sites in the east Shelby market. There are cancer services at the hospitals and strategically placed ambulatory sites in Midtown Memphis and DeSoto County as noted below which cover all quadrants of the service area:

Proposed West Cancer Center:

Physician professional services (medical oncology, gynecology oncology, surgical oncology, breast surgery, radiology), infusion services, radiology (PET/CT/MRI/Ultrasound), breast services (mammography, diagnostic mammography, biopsies, stereotactic biopsies), ambulatory surgery, radiation oncology, transfusion services, genetics, psychology services, outpatient oncology pharmacy, medical oncology and gynecology oncology medical education training services, research and clinical trial services, navigator and social services.

Midtown Center:

Physician professional services (medical oncology, gynecology oncology, surgical oncology, breast surgery, radiology), infusion services, radiology (PET/CT/MRI/Ultrasound), breast services (mammography, diagnostic mammography, biopsies, stereotactic biopsies), genetics, outpatient oncology pharmacy, medical oncology and gynecology oncology medical education training services, research and clinical trial services, navigator and social services.

DeSoto Center:

Physician professional services (medical oncology, gynecology oncology, surgical oncology, breast surgery, radiology), infusion services, radiology (CT/Ultrasound), breast services (mammography, diagnostic mammography, biopsies, stereotactic biopsies), genetics, outpatient oncology pharmacy, medical oncology and gynecology oncology medical education training services, research and clinical trial services, navigator and social services.

Hospital Services:

All adult Methodist Healthcare-Memphis Hospitals (including Methodist University, Methodist South, Methodist North and Methodist Germantown) provide inpatient oncology services (NP / MD Hospitalists), inpatient and outpatient surgical services and outpatient diagnostic and imaging services (MRI / CT). Methodist University and Methodist Germantown provide medical oncology units and medical oncology and gynecology oncology medical education training services. Methodist University also provides transfusion services, bone marrow transplant services and aphaeresis services. Methodist North and Methodist South provide mammography services.

Methodist recently opened the new Methodist Olive Branch Hospital in DeSoto County, Mississippi. The new facility provides inpatient oncology services (MD Hospitalists) and outpatient diagnostic and imaging services (MRI / CT).

Will West clinic Surrender CONs for PET and MRI at the current site?

Yes – the hospital-based PET and MRI services and equipment at West Clinic on Humphreys Boulevard will relocate (and the MRI will be replaced) to the new West Cancer Center, and the CON for the Humphreys Boulevard site will be surrendered.

Is Methodist surrendering the CON for LINAC at the current site?

Yes – the hospital-based LINAC services and equipment at the Methodist Radiation Oncology Center on Germantown Parkway will relocate to the new West Cancer Center, and the CON for the Germantown Parkway site will be surrendered.

The applicant notes the hospital-based unit at Germantown performs more than 11,000 procedures annually as compared to 8,736 which State Health Plan defines as full capacity. The applicant further states this is at 130% capacity. Please apply the same methodology to all LINACS in the combined Methodist system that are located in the proposed service area.

Methodist operates three LINACs in the service area. In 2012, Methodist provided 23,756 procedures which is an average of 7,919 per unit (91% capacity). Based on the forecasts in the application, projected growth in cancer incidence alone will overburden the three units and Methodist will be over full capacity operating at approximately 8,800 procedures per unit. Methodist would not have the capacity to continue outreach efforts to underserved communities and continue to extend high quality cancer services into the secondary markets. Methodist must add capacity to continue its mission.

6. Section B, Project Description, Item 1I.A.

There appears to be calculation errors in the Square Footage and Cost Per Square Footage Chart. The new proposed final square footage for new construction of 8,050 sq. ft. appears to be incorrect and the total proposed final square footage of 109,285 appears to be incorrect. Please recalculate and revise if needed.

Please see Attachment 5 for the revised Square Footage and Cost per Square Footage Chart as well as revised references on pages 8, 10 and 43 from the original application. The costs for the project were calculated correctly, yet there was a slight typo for new and total square feet. All revised pages and references to square footage are attached.

7. Section B, Project Description, Item 1I.C.

Table 2 which summarizes the moveable equipment is noted. Please add a column to Table 2 that reflects the distance from the old location to the new location.

This project includes the addition of one linear accelerator (and the relocation of one existing linear accelerator). CON approval has previously been granted for all other major moveable equipment at sites owned and operated by Methodist which are located within a four-mile radius of the proposed project site. The approved equipment will continue to serve the same community and meet the demand for services as demonstrated by current utilization. See Table 8 (the new table for this response is 8 versus 2 in the original application) below for a summary of other major moveable equipment for this project. The new table includes a row with the distance as per Google Maps from the old locations to the new location.

**TABLE 8
SUMMARY OF METHODIST HOSPITAL-BASED
MAJOR MOVEABLE EQUIPMENT**

	The West Clinic on Humphreys	Methodist Radiation Oncology Center	New to Market
Linear Accelerator		Existing to be relocated	New
CT Simulator		Existing to be relocated	
CT (2 units)	Existing to be relocated		
MRI 1.5T	Existing to be replaced and relocated		
PET/CT	Existing to be relocated		
Distance from New Location	3.8 Miles	0.4 Miles	

The chart notes the MRI 1.5T will be replaced when relocated. Please clarify if the new MRI will be similar with the exact capabilities. If not, please describe any upgrades or differences.

The replacement MRI 1.5T will be similar with exact capabilities.

8. Section C, Need, Item 1.a. (Construction, Renovation, Expansion, and Replacement of Health Care Institutions) Item 3.a

Table 8 of the cancer incidence percent increase from 2013 rates, 2018 and 2023 by cancer type by county is noted. However, please also include Tipton County in the table and resubmit a replacement page.

Please see Attachment 6 showing the percentage increase from 2012 rates for 2017 and 2022 by cancer type for Shelby, Fayette and Tipton counties in Tennessee and DeSoto County, Mississippi. Also, note the original chart had the incorrect years referenced and this has been corrected in this version.

9. Section C, Need, Item 1.a. (Construction, Renovation, Expansion, and Replacement of Health Care Institutions) Item 3.b

Please address item 3.b of the Construction, Renovation, Expansion, and Replacement of Health Institutions Criteria. If the question does not apply, please note N/A.

- 3. For renovation or expansions of an existing licensed health care institution:**
b. The applicant should demonstrate that the existing physical plant's condition warrants major renovation and expansion.

The original building was designed for medical offices and multiple tenants. This renovation and addition are required to re-purpose the building for use as a comprehensive cancer center. Renovations and redesign will provide adequate space, improve patient work flows and improve collaboration with oncologists, radiologists, surgeons and patients. New construction is required to accommodate the program.

This project covers the renovation and expansion of the entire building. The square footage needed to consolidate the Methodist affiliated cancer care services into a single site of care is slightly larger than the available space. The expansion will provide an increase of approximately 8,000 square feet for the addition of the radiation oncology center. The diagnostic and treatment services which require a CON are all hospital-based. The other physician, clinical research and administrative offices do not require CON approval. Full renovation and expansion costs are included since costs were not easily segregated due to the shared common space - the open atrium and waiting areas are located throughout the core of the building. The co-mingling of physician offices and hospital-based services was intentional to ensure efficient and effective collaboration and seamless patient flow.

The first floor will house administrative offices for Associates from the West Clinic. Additionally, the breast center, radiology, radiation therapy and phlebotomy hospital-based services will utilize the remainder of this floor. The Methodist Germantown Breast Center is located in this space now. It will be renovated and expanded in place. The other half of the first floor is where the phlebotomy, radiology and radiation therapy departments will be located. The linear accelerator vaults and MRI and CT rooms/equipment will be located mostly in the new space added to this side of the building. Due to risks of exposure to radiation and radioactive materials, modifications in this area will exceed those of normal renovations. Lead shielding will be installed around the perimeter of the rooms for control purposes.

The second floor will house the surgery clinics, sterile processing and physician clinics. The only hospital-based space on the second floor is the surgery center with the in-house central sterile processing unit. There will be two operating rooms which will function as a department of the hospital. Another area accessible from this floor is the contemplation garden on the roof of the first floor addition. This is a unique area currently included on West Clinic's Humphreys' campus - it includes a large bell and labyrinth walking path. The garden is a respite for patients during their battle with cancer. It is also a site for celebration. The West Clinic will relocate their bell and place it in the garden atop the roof. It is a long-standing tradition that holds special meaning for patients and families; patients ring the bell after finishing their treatment plans and overcoming cancer. It is a place for healing.

The third floor will house the remainder of the administrative and clinical research space operated by the West Clinic and the UTHSC as well as pharmacy space operated by the clinics. The hospital-space located on this floor includes the lab, additional phlebotomy space and the infusion - or chemotherapy infusion - chairs and beds.

Since this is an existing building with existing services, the coordination and modifications are more complex than normal construction. Methodist plans to minimize disruption to patients and existing services during the renovation. The breast center will continue operations during renovations with easy access from the main door. The majority of the renovations will be on east side of the first floor and on the second and third floors. Partitions will be temporarily installed allowing the renovation area to be sealed off to minimize the noise and debris and ensure the facility is always secure. To maintain continuity of care, the relocation of equipment will be staged in a compact time frame and coordinated with the scheduling staff.

10. Section C, Need, Item 1.a. (Megavoltage Radiation Therapy Services) Item 3.C

In Table 14 the applicant notes there was one (1) linear accelerator in Desoto County, Mississippi from 2010 to 2012. However, according to a report by the Mississippi Division of Health Planning and Resource Development (May 2013) there may be an additional Linear Accelerator recently approved for Baptist Memorial Hospital –Desoto. Please contact the Mississippi Division of Health Planning and Resource Development and confirm the addition of a linear accelerator to Baptist Memorial Hospital-Desoto (BMH-D).

It is confirmed with the Mississippi Division of Health that the additional LINAC was approved on August 29, 2013 for Baptist Memorial Hospital –DeSoto.

In addition, in the Mississippi Division of Health Planning and Resource Development, May 2013 report

(<http://msdh.ms.gov/msdhsite/index.cfm/29,5416,84,pdf/Baptist%20Memorial%20Hospital%20Desoto.pdf>), it is noted that 21.08%, or 68 patients migrate from Shelby County to Baptist Memorial Hospital-Desoto for linear accelerator services. Please discuss how the possible addition of one linear accelerator to Baptist Memorial Hospital-Desoto's Inventory will impact the proposed procedures by the applicant in Year One and Year Two of the proposed project.

The forecasted procedures for the Methodist and the West Cancer Center will not change. The plans to balance the volume per unit and lessen the burden on existing Methodist equipment are still a necessity. Projected LINAC volumes assumed Methodist's current market share of an increasing number of cancer incidence in the service area with nominal outreach in the secondary markets.

Please clarify if The West Clinic has any ownership interest or management relationships with the Linear Accelerator Service currently available at Baptist Memorial Hospital-Desoto located in Mississippi.

The West Clinic has no ownership interest or management relationship with the LINAC services at Baptist Memorial Hospital-DeSoto.

11. Section C, Need, Item 1.a. (Service Specific Criteria (Megavoltage Radiation Therapy Services) Item 6.e.

What are the staffing and quality assurance requirements the applicant states will be met? What is the name of the accrediting authority that maintains oversight of the staffing and quality assurance requirements the applicant states is being met?

Please see Attachment 7 for the American College of Radiology Radiation Oncology Practice Accreditation Program Requirements. These are the staffing and quality assurance requirements which will be met.

12. Section C, Need, Item 1.a. (Service Specific Criteria (Megavoltage Radiation Therapy Services) Item 8.a.

The applicant notes 8.a. is not applicable. Please clarify if there are no medically underserved areas as designated by the United States Health Resources and Services Administration in the proposed service area.

While the proposed site of this project is not located in a medically underserved area, there are designated areas in the service area that are deemed underserved by the United States Health Resources and Services Administration.

The Index of Medical Underserved (IMU) is a score that “involves four variables - ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over. The value of each of these variables for the service area is converted to a weighted value, according to established criteria. The four values are summed to obtain the area's IMU score.” Service areas with an IMU of 62.0 or less are designated as a medically underserved area. (source: <http://www.hrsa.gov/shortage/mua/index.html>)

There are 59 census tracts (geographic regions defined for taking census) in Shelby County that are underserved. These areas are in central, north and south Memphis which is one of many reasons that Methodist maintains a hospital and ambulatory presence in all quadrants of the county. Methodist maintains cancer services in these locations – Methodist University, Methodist North, Methodist South and the Midtown Centers - as described in the response to question #5.

All of the other counties in the service are all designated as underserved: Fayette County's IMU is 32.80 and Tipton County's is 44.90, DeSoto County's is 47.40, Marshall County's is 26.70, Crittenden County's 34.20. The West Cancer Center will provide integrated comprehensive cancer care to the entire service area.

13. Section C, Need, Item 1.a. (Service Specific Criteria (Megavoltage Radiation Therapy Services) Item 8.b.

Please demonstrate that the existing physical plant's condition warrants major renovation or expansion. Referring to other parts of the application is not an adequate response.

The original building was designed for medical offices and multiple tenants. This renovation and addition are required to re-purpose the building for use as a comprehensive cancer center. Renovations and redesign will provide adequate space, improve patient work flows and improve collaboration with oncologists, radiologists, surgeons and patients. New construction is required to accommodate the program.

This project covers the renovation and expansion of the entire building. The square footage needed to consolidate the four ambulatory Methodist sites and services into a single site of care is slightly larger than the available space. The expansion will provide an increase of approximately 8,000 square feet for the addition of the radiation oncology center which will include the radiation therapy vaults for the LINAC units.

Half of first floor will house the radiology and radiation therapy departments. The linear accelerator vaults and MRI and CT rooms/equipment will be located mostly in the new space added to this side of the building. Due to risks of exposure to radiation and radioactive materials, modifications in this area will exceed those of normal renovations. Lead shielding will be installed around the perimeter of the rooms for control purposes.

14. Section C. (Need) Item 3.

Please provide a map of the entire state of Tennessee designating the applicant's declared service area counties. Please provide distinctive highlighting/ markings to readily differentiate the service area counties from the other non- service area counties.

Please see Attachment 8 for another Service Area map showing the entire state of Tennessee and designating Shelby, Fayette and Tipton counties in Tennessee, DeSoto and Marshall counties in Mississippi and Crittenden County, AR.

15. Section C. (Need) Item 4 (Socio-Demographic Information of the Service Area)

Your response to this item is noted. Using population data from the Department of Health, enrollee data from the Bureau of TennCare, and demographic information from the US Census Bureau, please complete the following table and include data for each county in your proposed service area.

<i>Variable</i>	<i>Shelby County</i>	<i>Fayette County</i>	<i>Tipton County</i>	<i>DeSoto County</i>	<i>Service Area</i>	<i>Tennessee</i>
<i>Current Year (CY), Age 65+</i>						
<i>Projected Year (PY), Age 65+</i>						
<i>Age 65+, % Change</i>						
<i>Age 65+, % Total (PY)</i>						
<i>CY, Total Population</i>						
<i>PY, Total Population</i>						
<i>Total Pop. % Change</i>						
<i>TennCare Enrollees</i>						
<i>TennCare Enrollees as a % of Total Population</i>						
<i>Median Age</i>						
<i>Median Household Income</i>						
<i>Population % Below Poverty Level</i>						
<i>http://quickfacts.census.gov/qfd/states/47/47047.html</i>						

Please see Attachment 9 for the completed table for the proposed service area including Shelby, Fayette and Tipton counties in Tennessee, DeSoto and Marshall counties in Mississippi and Crittenden County, Arkansas.

16. Section C. (Need) Item 5.

The applicant notes Baptist Memorial-Tipton Hospital has two unimplemented CONs (CN1211-057A and CN1105-018A) to create a cancer center close to the Memphis hospital campus. Please indicate the distance from the applicant's proposed site to Baptist Memorial-Tipton Hospital's approved site that will create a new cancer center. Also, please clarify if the unimplemented CONs (CN1211-057 and CN1105-018) will add additional linear accelerators to the applicant's proposed service area.

The proposed Baptist Memorial-Tipton Hospital cancer center is located close to the Baptist Memphis campus in Shelby County. The site is 3.5 miles away per Google Maps from the proposed West Cancer Center. The CONs approved for Baptist's center state their three existing LINACs will be relocated to their new building in the east market. They are not proposing to add any new equipment in the market.

The Methodist LINACs will extend cancer care services to both the inner city and the eastern suburbs. The two existing units at the Methodist University Hospital are almost 16 miles away from the proposed West Cancer Center site in the Memphis Medical Center located in midtown/downtown Memphis. The other existing Methodist unit in

Germantown, a suburb in eastern Shelby County, will relocate to the new site which is less than a half a mile away. The project proposes to add a second LINAC at this site to accommodate existing and projected volumes.

17. Section C. (Economic Feasibility) Item 1. (Project Cost Chart)

The following definition regarding lease cost in Tennessee Health Services and Development Agency Rule 0720-9-.01 (4)(c) states "If the acquisition is by lease, the cost is either the fair market value of the of the lease, or the total amount of the lease payments, whichever is greater."

Please provide a calculation of both the sum of the lease payments over the term of the lease as well as a determination of the fair market value (FMV) of the leased space into which the proposed cancer center will be located.

As noted in question 3 above, the site for the proposed cancer center will be purchased and not leased. The purchase price of the building was on the wrong line of the Project Costs Chart. See Attachment 10 for the revised Project Costs Chart with the building costs moved from line B.1. to line A.3.

In the Project Costs Chart, the applicant refers to two separate lists. Please clarify where these lists are located. If necessary, please note the location of the list on the Project Costs Chart and resubmit a revised chart.

Please see Attachment 10 for the Revised Project Costs Chart as well as the List of Moveable Equipment >\$50,000 (which was in the originally filed application as Attachment C: Economic Feasibility (1)(c)) and the list of leased equipment. The PET/CT and 2 CTs are leased. The Project Costs include 5 years of leased expense and maintenance which was greater than the FMV as noted in the attachment.

18. Section C. (Economic Feasibility) Question 3

Please compare the hospital cost per square foot to the following hospital construction CON approved application for years 2010 through 2012:

**Hospital Construction Cost Per Square Foot
Years: 2010-2012**

	Renovated Construction	New Construction	Total Construction
1st Quartile	\$99.12/sq. ft.	\$234.64/sq. ft.	\$167.99/sq. ft.
Median	\$177.60/sq. ft.	\$259.66/sq. ft.	\$235.00/sq. ft.
3rd Quartile	\$249.00/sq. ft.	\$307.80/sq. ft.	\$274.63/ sq. ft.

As noted in question #6 above the new and total square footage numbers were slightly revised and replacement pages are attached. The revised construction costs per square foot are reasonable and comparable to similar CON projects approved for 2010 – 2012. See Table 9 below for the comparison of construction costs. The renovated are slightly

above and total costs are below the 1st Quartile comparisons. The new construction costs include radiation therapy and radiation vaults which are exceptionally expensive due to the lead shielding and used to reduce the risks of exposure to radiation and radioactive materials.

**TABLE 9
CONSTRUCTION COSTS COMPARISON**

	Renovated Construction	New Construction	Total Construction
Construction Costs / Square Foot	\$109.93	\$490.10	\$144.88
Construction + Contingency Costs / Square Foot	\$120.92	\$539.11	\$159.37
Comparison	Between 1 st Quartile and Median	Above 3 rd Quartile	Below 1 st Quartile

19. Section C. (Economic Feasibility) Question 4 (Projected Data Chart)

Please provide a projected Data Chart for the proposed Cancer Center only.

Please see Attachment 11 for the Projected Data Chart and Other Operating Revenue and Expense detail for the proposed Cancer Center only.

Please provide a Projected Data Chart for the Proposed Additional Linear Accelerator only.

Please see Attachment 12 for the Projected Data Chart and Other Operating Revenue and Expense detail for the proposed Additional Linear Accelerator only.

The Projected Data Chart for Methodist Healthcare-Memphis Hospitals is noted. Please complete the following tables and place the tables on a separate page labeled 46A to be located after the Projected Data Chart for Methodist Healthcare-Memphis Hospitals:

Please see Attachment 13 for the additional page detailing the Other Operating Revenue and Expense for the Projected Data Chart for Methodist Healthcare-Memphis Hospitals.

PROJECTED DATA CHART-OTHER OPERATING REVENUE
OTHER OPERATING REVENUE CATEGORIES

	Year _____	Year _____
1.	\$ _____	\$ _____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____

Total Other Operating Revenue \$ _____ \$ _____

PROJECTED DATA CHART-OTHER EXPENSES
OTHER EXPENSES CATEGORIES

	Year _____	Year _____
1.	\$ _____	\$ _____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____

Total Other Expenses \$ _____ \$ _____

20. Section C. (Economic Feasibility) Question 6.A

Please compare the hospital Gross Charges per Procedure/Treatment by quartiles for years 2010 through 2012 using the following table:

Gross Charges per Procedure/Treatment
 By Quartiles
 YEAR = 2012

Equipment Type	1st Quartile	Median	3rd Quartile
CT Scanner	\$887.60	\$1,735.40	\$2,680.89
Linear Accelerator	\$849.62	\$1,077.79	\$1,406.21
Lithotripter	\$8,200.00	\$12,288.61	\$17,237.00
MRI	\$1,598.11	\$2,129.25	\$3,321.60
PET Scanner	\$3,667.96	\$4,497.71	\$6,304.71

Source: Medical Equipment Registry - 6/28/2013

Please see the table below summarizing the average charge per procedure for Methodist Healthcare-Memphis Hospitals (using Methodist University Hospital as the example) from the Medical Equipment Registry for 2012 as compared to the Quartiles shown above. This comparison shows the average per procedure which is easier to compare than the charge per CPT listed below.

Procedure	CPT	Current Rate
PET		
BRAIN IMAGE PET METABOLIC EVALUATION	78608	\$ 7,912
MYOCARDIAL IMAGING PET METABOLOC EVAL	78459	\$ 8,008
TUMOR IMAGING PET W/CT SKULL TO MIDTHIGH	78815	\$ 8,601
TUMOR IMAGING PET W/CT WHOLE BODY	78816	\$ 8,601
UNLISTED NUC MED PROCEDURE PET	78999	\$ 1,496
LINAC		
CONTINUING MEDICAL PHYSICS CONSULT W TRM	77336	\$ 521
CT GUIDE RADIATION THER FIELD PLACE	77014	\$ 845
HDR BASIC DOSIMETRY CALC	77300	\$ 521
HDR BRACHYTHERAPY 2-12 CHANNELS	77786	\$ 11,400
HDR ISODOSE CALC 12+SOURCES COMPLEX	77328	\$ 1,195
MEDICAL RADIATION PHYSICS CONSULT SPEC	77370	\$ 1,195
RADIATION DOSIMETRY CALC BASIC	77300	\$ 521
RADIATION THERAPY DELIVERY, IMRT	77418	\$ 2,507
RADIATION THERAPY DELIVERY, VMAT	77418	\$ 2,507
RADIATION TRMT 3+AREAS 11-19MEV	77414	\$ 663
RADIATION TRMT 3+AREAS 6-10MEV	77413	\$ 663
SPEC TRMT PROC	77470	\$ 1,611
STEROSCOPIC XRAY GUIDANCE DELIVERY	77421	\$ 469
TELEETHER ISODOSE PLAN COMPLEX	77315	\$ 1,195
THER RAD PORT FILM/FILMS	77417	\$ 373
THER RAD SIMULATION AIDED FIELD 3D	77295	\$ 4,654
THER RAD SIMULATION AIDED FIELD COMPLEX	77290	\$ 1,195
THER RAD SIMULATION AIDED FIELD SIMP	77280	\$ 521
TRMT DEVICE DESIGN & CONSTRUCT COMPLEX	77334	\$ 961

21. Section C. (Economic Feasibility) Question 9

The patient mix during the first full year of operation is noted. The patient payor mix appears to be for Methodist overall. Please provide a table of the Projected Data Mix for Year 2016 specific to the proposed project.

TABLE 13
PAYOR MIX, 2016 - WEST CANCER CENTER PROJECT ONLY

Payor	2016 Projected Revenue	% of Total Revenue
Medicare	\$ 203,963,694	44%
TennCare/Medicaid	\$ 53,034,241	12%
Self Pay	\$ 20,769,157	5%
Commercial/Other	\$ 183,327,605	40%
Total	\$ 461,094,696	100%

22. Section C, Contribution to Orderly Development, Item 3.

What will be the staffing pattern for the proposed project?

Please provide a comparison of the clinical staff salaries in the proposal to prevailing wage patterns in the service area either through comparison of the applicant's facility with similar previously approved projects within the primary service area, through the Tennessee Department of Labor & Workforce Development publications, or other published sources.

Please see Table 14 below for proposed staffing for the project.

TABLE 12
METHODIST CURRENT CHARGE SCHEDULES

Procedure	CPT	Current Rate
MRI		
MRA HEAD WO CONT	70544	\$ 3,358
MRA NECK WO CONT	70547	\$ 3,358
MRI ABD W/WO CONT	74183	\$ 4,572
MRI ABD WO CONT	74181	\$ 3,358
MRI BRAIN & STEM W CONT	70552	\$ 3,816
MRI BRAIN & STEM W/WO CONT	70553	\$ 4,572
MRI BRAIN & STEM WO CONT	70551	\$ 3,358
MRI PELVIS W/WO CONT	72197	\$ 4,572
MRI SPINE CERV W/WO CONT	72156	\$ 4,572
MRI SPINE CERV WO CONT	72141	\$ 3,358
MRI SPINE LUMBAR W/WO CONT	72158	\$ 4,572
MRI SPINE LUMBAR WO CONT	72148	\$ 3,358
MRI SPINE THORACIC W/WO CONT	72157	\$ 4,572
MRI SPINE THORACIC WO CONT	72146	\$ 3,358
CT		
CT ABD AND PEL W/WO CONTRAST	74178	\$ 5,581
CT ABD AND PEL WITH CONTRAST	74177	\$ 4,796
CT ABD AND PEL WO CONTRAST	74176	\$ 3,464
CT ABD TRIPLE PHASE	74170	\$ 2,791
CT ABD W CONT	74160	\$ 2,398
CT ANGIO HEAD W/WO CONT W IMAGE POST PRO	70496	\$ 2,791
CT ANGIO NECK W/WO CONT W IMAGE POST PRO	70498	\$ 2,791
CT BRAIN/HEAD W/WO CONT	70470	\$ 2,791
CT BRAIN/HEAD WO CONT	70450	\$ 1,733
CT GUIDE ABSCESS DRNG PERCUT W CATH PLAC	75989	\$ 1,571
CT GUIDE NDL BX	77012	\$ 2,398
CT MAXILLOFACIAL AREA WO CONT	70486	\$ 1,733
CT SOFT TISSUE NECK W CONT	70491	\$ 2,398
CT SPINE CERV WO CONT	72125	\$ 1,733
CT SPINE LUMBAR WO CONT	72131	\$ 1,733
CT THORAX W CONT	71260	\$ 2,398
CT THORAX WO CONT	71250	\$ 1,733
CTA ABD/PELVIS W/WO CONTRAST	74174	\$ 3,049

TABLE 10
METHODIST SERVICE AREA
HOSPITAL-BASED CHARGE COMPARISON, 2012

Facility Type	Facility	Charge per Procedure	Comparison
HOSP	Methodist University Hospital – MRI	\$ 3,545	Slightly Above 3 rd Quartile
HOSP	Methodist University Hospital – CT	\$ 2,437	Between the Median and 3 rd Quartile
HOSP	Methodist University Hospital – PET/CT	\$ 8,186	Above the 3 rd Quartile
HOSP	Methodist University Hospital – LINAC	\$ 7,919	Above the 3 rd Quartile

Please see Table 12 on the following page which is copied from the originally file application with 2013 charges from Methodist per CPT for comparison. MRI charges are slightly higher than the 3rd Quartile comparison. CT charges are approximately at the 3rd Quartile with a few at the Median. PET/ CT charges are above the 3rd Quartile. LINAC charges are more difficult to compare due to the wide range of treatments performed by the unit. The less resource intensive procedures are well within the 1st Quartile and Median comparisons. The High Dose Radiation Brachytherapy charges are above the 3rd Quartile.

Please also see a copy of the comparison of LINAC charges from the original application for other LINAC units in the Tennessee service area. The data is from average charges per procedure from the State Equipment Registry. Methodist charges are comparable to other Shelby County services.

TABLE 11
METHODIST SERVICE AREA
HOSPITAL-BASED LINAC CHARGE COMPARISON, 2012

Facility Type	Facility	Charge per Procedure
HOSP	Baptist Memorial Hospital-Memphis	\$ 5,526
HOSP	Baptist Memorial Hospital-Tipton	\$ 7,610
HOSP	St. Francis Hospital	\$ 3,398
HOSP	Methodist Healthcare – University Hospital	\$ 7,919

TABLE 14
METHODIST LE BONHEUR HEALTHCARE CURRENT PREVAILING WAGES
AND ANTICIPATED CLINICAL STAFFING PATTERNS, 2016-2017

Methodist Position Title	West Cancer Center			BLS 2012 Memphis MSA Data *		
	FTE' s 2016	FTE' s 2017	Mid Hourly 2013	Mean Hourly	Mean Annual	BLS Occupation Title
Accountant/Financial	5.0	5.0	\$23.93	\$ 29.30	\$ 60,940	Accountants and Auditors
Admin Asst	11.0	11.0	\$14.75	\$ 20.93	\$ 43,540	Executive Secretaries/Admin Assist
Care Support Coordinator	3.0	3.0	\$16.24	\$ 15.93	\$ 33,130	Office/Admin Support Occupations
Chaplain	1.0	1.0	\$21.72	\$ 22.77	\$ 47,370	Clergy
Executives	2.0	2.0	\$41.39	\$ 82.09	\$170,760	Chief Executives
Clinical Coordinator	8.0	8.0	\$23.93	\$ 25.37	\$ 52,770	Healthcare Practitioners/Technical
Clinical Manager	8.0	8.0	\$38.83	\$ 43.46	\$ 90,400	Medical/Health Services Managers
Data Analyst	3.0	3.0	\$31.99	\$ 38.51	\$ 80,110	Computer Systems Analysts
Data Coordinator/Admin	3.0	3.0	\$38.83	\$ 37.77	\$ 78,570	Database Administrators
Data Specialist	1.0	1.0	\$17.90	\$ 22.81	\$ 47,440	Computer User Support Specialists
Registered Dietitian	0.8	0.8	\$23.93	\$ 24.81	\$ 51,600	Dietitians and Nutritionists
Dosimetrist	4.0	4.0	\$45.04	\$ 33.50	\$ 69,690	Radiation Therapist
Executive Director	1.0	1.0	\$90.98	\$ 45.05	\$ 93,690	Management Occupations
Facilities Mgr/Director	3.0	3.0	\$35.25	\$ 44.72	\$ 93,010	Managers, All Other
Health Services Mgrs	8.0	8.0	\$45.04	\$ 43.46	\$ 90,400	Medical/Health Services Managers
HR Generalist / Specialist	2.5	2.5	\$26.37	\$ 25.52	\$ 53,080	Human Resources Specialists
Lab Assistant	3.0	3.0	\$13.39	\$ 18.50	\$ 38,480	Medical/Clinical Laboratory Techs
Licensed Social Worker	1.0	1.0	\$26.37	\$ 25.22	\$ 52,450	Healthcare Social Workers
LPN	4.0	4.0	\$17.90	\$ 18.70	\$ 38,890	Licensed Practical Nurses
Medical Asst/Clerical	26.5	26.5	\$13.39	\$ 13.94	\$ 28,990	Medical Secretary
Medical Lab Tech	2.6	2.6	\$21.72	\$ 18.50	\$ 38,480	Med/Clinical Laboratory Techs
Medical Office Admin	15.0	15.0	\$26.37	\$ 34.98	\$ 72,750	Administrative Services Manager
Medical Tech	5.8	5.8	\$29.04	\$ 28.37	\$ 59,000	Medical Technologists
Nurse Practitioner	9.0	9.0	\$44.37	\$ 45.54	\$ 94,720	Nurse Practitioners
Patient Representative	28.8	28.8	\$14.75	\$ 13.94	\$ 28,990	Medical Secretary
Pharmacist	2.5	2.5	\$52.02	\$ 58.57	\$121,830	Pharmacists
Pharmacy Technician	5.6	5.6	\$17.90	\$ 14.21	\$ 29,550	Pharmacy Technicians
Phlebotomist	8.0	8.0	\$13.39	\$ 12.77	\$ 26,570	Phlebotomists
Physicist / Chief	4.0	4.0	\$90.98	\$ 66.68	\$138,700	Physicist
Psych	1.0	1.0	\$35.25	\$ 30.50	\$ 63,440	Clinical/Counseling Psychologists
Radiology Tech	30.3	30.3	\$26.37	\$ 25.16	\$ 58,470	Radiologic Technologists
Scheduler	8.0	8.0	\$14.75	\$ 18.91	\$ 39,320	Healthcare Support Workers
RN	58.5	58.5	\$29.04	\$ 29.09	\$ 60,500	Registered Nurse
Simulation Therapist	7.0	7.0	\$31.99	\$ 33.50	\$ 69,690	Radiation Therapist
Surgical Tech	3.0	3.0	\$17.90	\$ 18.15	\$ 37,750	Surgical Technologists
Total	287.9	287.9				

* Source: Bureau of Labor Statistics – May 2012 MSA Occupational Employment & Wage Estimates – Memphis

23. Proof of Publication

Please submit a copy of the full page of the newspaper in which the notice of intent appeared with the mast and dateline intact or submit a publication affidavit which is supplied by the newspaper as proof of the publication of the letter of intent.

The full page of the newspaper was submitted with the original application as confirmed with the HSDA office after receipt of the supplemental questions. Please see Attachment 14 for a more legible copy of the notice of intent.

LETTERS OF SUPPORT - Please see Attachment 15 for Letters of Support. Please amend to original application.

Attachment 4

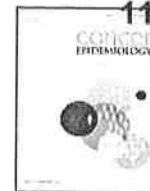
Breast Cancer Disparity Study



Contents lists available at SciVerse ScienceDirect

Cancer Epidemiology

The International Journal of Cancer Epidemiology, Detection, and Prevention

journal homepage: www.cancerepidemiology.netThe racial disparity in breast cancer mortality in the 25 largest cities in the United States[☆]Steven Whitman^{a,*}, Jennifer Orsi^b, Marc Hurlbert^c^a Sinai Urban Health Institute, Room K 437, Mount Sinai Hospital, 1500 S. California Ave, Chicago, IL 60608-1797, USA^b Metropolitan Chicago Breast Cancer Task Force, 1645 W. Jackson Blvd., Suite 450, Chicago, IL 60612, USA^c Avon Foundation Breast Cancer Crusade, 1345 Avenue of the Americas, New York, NY 10105-0196, USA

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ABSTRACT

Introduction: Although the racial disparity in breast cancer mortality is widely discussed there are no studies that analyze this phenomenon at the city level. **Methods:** We used national death files, abstracting those cases for which the cause was malignant neoplasm of the breast (ICD-10 = C50) for the numerators and American Community Survey data for the denominators. The 25 largest cities in the US were the units of analysis. Non-Hispanic Black:non-Hispanic White rate ratios (RRs) were calculated, along with their confidence intervals, as measures of the racial disparity. Seven ecological (city-level) variables were examined as possible correlates. **Results:** Almost all the NHB rates were greater than almost all the NHW rates. All but 3 of the RRs (range 0.78–2.09; median = 1.44) were >1, 13 of them significantly so. None of the RRs < 1 were significant. From among the 7 potential correlates, only median household income ($r = -0.43$, $p = 0.037$) and a measure of segregation ($r = 0.42$, $r = 0.039$) were significantly related to the RR. **Conclusion:** This is the first study that we have been able to locate which examines city-level racial disparities in breast cancer mortality. The results are of concern for several cities and for the field in general. A strategy for reducing this disparity in Chicago is in place and may serve as a model for other cities wanting to initiate a similar process. Clearly it is time to take action.

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1. Introduction

Although White women are diagnosed with breast cancer more than Black women, Black women die from it at a much higher rate. For example, from 2000 to 2004 the age-adjusted breast cancer incidence rate for non-Hispanic White (NHW) women in the United States was 132.5 (per 100,000 women) compared to 118.3 for non-Hispanic Black (NHB) women, yielding an NHB:NHW rate ratio (RR) of 0.89. In the same years the mortality rates were 25.0 (age-adjusted, per 100,000 women) for NHW women and 33.8 for NHB women (RR = 1.35) [1]. Evidence shows this paradox exists for women both under 50 and over 50 [2].

These national figures are averages across many geographical units throughout the country. In a previous study we documented the nature of the racial disparity in breast cancer mortality in Chicago and found the NHB:NHW RR = 1.98 in 2005 compared with 1.36 in New York City and 1.38 for the United States during this same year [3]. This very large racial disparity in breast cancer mortality in Chicago created a great deal of attention in the media

and the breast cancer community. As a result, the Metropolitan Chicago Breast Cancer Task Force was formed. This area-wide organization consists of over 100 individuals and 74 organizations devoted to eliminating the racial disparity in breast cancer through a multifaceted approach [4].

City-level data thus offer the potential to both understand health problems at the local level and to mobilize constituencies for programs or interventions for improvement. Despite this, we are not aware of any reports of breast cancer mortality analyses for cities other than Chicago. With this in mind, this paper presents race-specific breast cancer mortality rates for the 25 largest cities in the United States, measures the racial disparities for each city, analyzes societal (ecological) risk factors that we hypothesize could play a role in breast cancer disparities and discusses the insights and implications of such an analysis.

2. Methods

The 25 most populous cities were determined using 2005 Census data [5]. Deaths where the cause was malignant neoplasm of the breast (ICD-10 = C50) were included in this analysis. Numerator data for 2005–2007 were abstracted from death files maintained by the Centers for Disease Control and Prevention in Atlanta, Georgia. Population-based denominators for the non-Hispanic White (NHW)

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population were obtained from the American Community Survey 2005–2007 3-year estimates [6]. Population-based denominators for the non-Hispanic Black (NHB) population were not readily available. We thus estimated the population using an age-specific ratio calculated by dividing the number of non-Hispanic Blacks by total Blacks in the 2000 Census and multiplying the proportion by the number of all Blacks in 2005–2007 for each age group. For each of the three data sources, the census, the ACS and the death files the NHB and NHW classifications are defined by self-identification. Hispanic ethnicity is asked first followed by racial identity and then these two variables are cross-tabulated to obtain the racial categories employed in this analysis. Age-adjusted rates per 100,000 population were calculated based on the year 2000 standard US population and represent a 3-year average (2005–2007). Data for Indianapolis breast cancer deaths were missing and thus this analysis includes 24 (rather than 25) cities.

To measure disparity in breast cancer mortality we calculated the NHB:NHW rate ratio for each of the 24 cities. A rate ratio of 1.00 is interpreted as no disparity between the NHB and NHW rate, while a rate ratio greater than 1.00 means the NHB rate is higher than the NHW rate and a rate ratio less than 1.00 means the NHW rate is higher. A rate ratio was considered to be statistically significant if the 95% confidence interval did not contain 1.00. The confidence interval for the rate ratio was calculated using a Taylor series expansion technique [7]. To examine the association between each risk factor and rate ratio, we utilized the PROC CORR procedure in SAS v 9.1, which calculates the Pearson correlation coefficient.

NHB excess deaths stemming from the NHB:NHW disparity were computed for each city by applying the age-specific NHW breast cancer mortality rates to the age-specific NHB population. These were then totaled and subtracted from the NHB observed breast cancer deaths. The difference is the excess breast cancer mortality due to the disparity.

We determined the coefficient of correlation for seven ecological risk factors measured at the city level (i.e., the city is the unit of analysis) with the breast cancer mortality racial rate ratios for these 24 cities. These included the proportion of the population that was non-Hispanic White, proportion that was non-Hispanic Black, size of the population, median household income, proportion that is below the poverty level, the Gini Index, and the NHB:NHW Index of Dissimilarity (IOD) at the census tract level. The IOD measures the evenness of geographic spread between two groups within an area and is frequently used as a measure of racial segregation. In such cases, the Index estimates the proportion of NHB people that would have to move from one census tract to another in order to generate an even distribution of NHB and NHW people or vice versa (i.e., to achieve full integration). The IOD ranges from 0 (perfect integration) to 1 (perfect segregation) [8,9].

The Gini Index is a measure of relative mean difference that examines the dispersion of inequality in a population. In this instance, the Gini Index is used to measure the inequality in income across the population. The measure, based upon the distribution below and above a Lorenz curve, ranges from 0 to 1 with 0 indicating that everyone in the population has equal income and 1 indicating there is total income inequality [10].

The first six risk factors were obtained from the 2005–2007 ACS study. The IOD was based on Census 2000 data and was obtained from the University of Michigan Population Studies Center [11].

2.1. Statistical analysis

SAS v 9.1 was used for all analyses. SigmaPlot 11.0 was used to create Fig. 1.

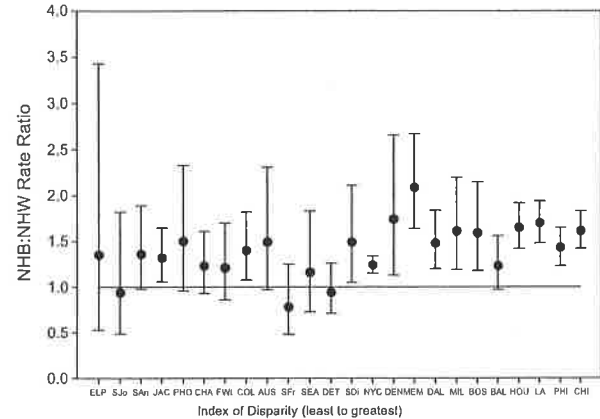


Fig. 1. 3-Year estimates of breast cancer mortality disparity between non-Hispanic Black and non-Hispanic White Women for 24 of the 25 largest cities in the United States, 2005–2007, arranged according to the ascending Index of Disparity.

3. Results

Table 1 presents the age-adjusted breast cancer mortality rates for NHB and NHW women in 2005–2007, and the respective racial rate ratios. The 24 cities are arranged in descending order according to population size. New York, the largest city, had an RR = 1.24 and Denver, the smallest city, had an RR = 1.74. Memphis had the largest RR (2.09) and San Francisco had the smallest (0.78). Those rate ratios that are statistically significant are in bold face in the table. These correspond to the cities in Fig. 1 for which the confidence intervals do not include 1. Note that only three ratios are less than 1 and none significantly so but 13 are significantly greater than 1 and several others are near-significant. As would be expected, there is a significant positive correlation between the NHB rate and the disparity ($r = 0.67$, $p < 0.001$) and a significant negative correlation between the NHW rate and the disparity ($r = -0.53$, $p = 0.008$).

The rate ratio is a function of both the NHW and NHB rates. For example, the RR for Detroit is close to unity because the NHW rate (37.3) is very high among the NHW rates while its NHB rate is about average (for NHB rates) among these cities (35.2). In Memphis the RR is so high (2.09) because the NHB rate is high (44.6) and the NHW rate is low (21.3). The very low RR in San Francisco is due to the NHB rate (19.6), which is the lowest of all the cities. Note that there is a great deal more variation in the NHB rates than the NHW rates. These rates may be compared with the breast cancer mortality goal of Healthy People 2010 of 22.3 [12] and with the U.S. rates presented in Table 1.

There is very substantial variation in these breast cancer mortality rates. The largest of all 48 rates is for NHB people in Houston (47.3) and the smallest is for NHW people in Denver (17.7). Interestingly, the rate for NHB people in San Francisco is almost as small as the NHW rate in Denver but overwhelmingly the rates for NHW women are much lower than the rates for NHB women. In fact, among the 24 cities, only 1 has an NHW rate over 29.0 while 21 have NHB rates above this value. For comparison we note that in 2007 the NHB breast cancer mortality rate for the US overall was 32.2 while it was 23.0 for NHW women [13].

Table 1 also contains the excess annual NHB breast cancer deaths for each city for which the rate ratio was significantly different from 1. The number of such deaths is a function of both the disparity and the NHB population size. Thus, there were 70 such deaths in New York City annually, or 1.3 a week. The number of excess deaths is about the same for Chicago (76), where the disparity is much larger but the population is considerably smaller (Tables 1 and 2).

Table 1

3-Year estimates of breast cancer mortality disparity between non-Hispanic Black and non-Hispanic White Women for 24 of the 25 largest cities in the United States, 2005–2007.

City, State (largest to smallest)	NHB rate ^a	NHW rate ^a	Rate ratio ^a	95% CI	Annual excess NHB deaths [#]
United States	33.2	23.7	1.40	1.38–1.42	1722
New York City, NY	31.2	25.2	1.24	1.15–1.34	70
Los Angeles, CA	46.5	27.4	1.70	1.48–1.94	43
Chicago, IL	37.8	23.4	1.61	1.42–1.83	76
Houston, TX	47.3	28.7	1.65	1.42–1.92	49
Philadelphia, PA	35.8	25.1	1.43	1.23–1.65	38
Phoenix, AZ	32.9	22.0	1.50	0.96–2.33	
San Antonio, TX	36.8	27.0	1.36	0.98–1.89	
San Diego, CA	36.7	24.7	1.49	1.05–2.11	5
Dallas, TX	37.5	25.3	1.48	1.20–1.84	18
San Jose, CA	27.2	28.9	0.94	0.49–1.82	
Detroit, MI	35.2	37.3	0.94	0.71–1.26	
Indianapolis, IN	–	–	–	–	
Jacksonville, FL	37.1	28.1	1.32	1.06–1.65	10
San Francisco, CA	19.6	25.2	0.78	0.48–1.25	
Columbus, OH	36.6	26.1	1.40	1.08–1.82	9
Austin, TX	33.1	22.2	1.49	0.97–2.31	
Memphis, TN	44.6	21.3	2.09	1.64–2.67	42
Baltimore, MD	31.6	25.7	1.23	0.97–1.56	
Fort Worth, TX	29.8	24.6	1.21	0.86–1.70	
Charlotte, NC	32.3	26.3	1.23	0.93–1.61	
El Paso, TX	24.9	18.4	1.35	0.53–3.43	
Milwaukee, WI	29.6	18.4	1.61	1.19–2.20	12
Seattle, WA	30.0	25.9	1.16	0.73–1.83	
Boston, MA	34.6	21.7	1.59	1.18–2.15	10
Denver, CO	30.8	17.7	1.74	1.13–2.66	4

^a Bolded rate ratio denotes it is significantly different from 1.00.

^a Age-adjusted rate is expressed per 100,000 females using the US 2000 Standard Population.

[#] Excess NHB deaths are only calculated for rate ratios that are significantly different from 1.00.

Table 2 presents the line listing for all the cities and contains the seven hypothesized correlates of the RR. The variability or lack thereof in each of these measures is noteworthy. For example, the median household income varies from a low of \$29,100 for Detroit (with one of the lowest RRs, 0.94) to a high of \$76,400 for San Jose (also with a low RR = 0.94) and \$65,500 for San Francisco (also with a low RR = 0.78). The IOD, which here is used as a measure of racial segregation (1 = complete segregation) varies from a high of 86%

for Chicago (RR = 1.61) to a low of 35% for El Paso (RR = 1.35) and 41% for San Jose (RR = 0.94). The Gini Index ranges from a low of 0.43 in San Jose (RR = 0.94) to a high of 0.54 in New York (RR = 1.24). This 0.43 is a comparatively elevated Gini Index [14]. Data are similarly displayed for the other four potential correlates.

We also calculated the bivariate correlations of the RR with each of the predictor variables. These are listed at the bottom of Table 2. Of the seven hypothesized risk factors only median household

Table 2

Correlates of the rate ratios for 24 of the 25 largest cities in the United States, 2005–2007.

City, State (largest to smallest)	NHB:NHW BC mortality rate ratio	Population size	% NHW	% NHB	Median household income	% Below poverty level	Index of disparity	Gini Index
New York City, NY	1.24	8,246,310	35.1	23.7	47,581	19	0.629	0.535
Los Angeles, CA	1.70	3,770,590	29.3	9.7	46,292	19	0.732	0.524
Chicago, IL	1.61	2,740,224	30.9	34.7	44,473	21	0.857	0.509
Houston, TX	1.65	2,034,749	28.0	24.0	40,285	21	0.718	0.519
Philadelphia, PA	1.43	1,454,382	39.4	43.1	34,767	24	0.771	0.487
Phoenix, AZ	1.50	1,440,018	48.1	5.2	47,223	17	0.511	0.461
San Antonio, TX	1.36	1,267,984	29.3	6.3	42,217	18	0.490	0.460
San Diego, CA	1.49	1,264,263	48.2	6.7	60,185	13	0.623	0.458
Dallas, TX	1.48	1,187,603	30.6	23.2	40,147	21	0.665	0.533
San Jose, CA	0.94	898,901	31.7	3.1	76,354	10	0.410	0.433
Detroit, MI	0.94	837,711	8.4	82.5	29,109	32	0.603	0.473
Jacksonville, FL	1.32	797,966	58.7	29.9	47,381	13	0.510	0.442
San Francisco, CA	0.78	757,604	44.7	6.7	65,519	12	0.594	0.508
Columbus, OH	1.40	724,095	63.3	26.1	42,031	20	0.585	0.436
Austin, TX	1.49	725,306	49.9	8.3	48,227	18	0.589	0.483
Memphis, TN	2.09	649,443	30.2	62.3	35,181	24	0.652	0.501
Baltimore, MD	1.23	639,493	30.4	63.6	36,304	20	0.715	0.490
Fort Worth, TX	1.21	635,612	44.1	18.0	44,804	17	0.584	0.460
Charlotte, NC	1.23	649,578	50.3	33.2	51,050	12	0.571	0.488
El Paso, TX	1.35	592,627	15.0	2.6	34,626	27	0.347	0.477
Milwaukee, WI	1.61	584,007	40.9	38.4	35,233	24	0.698	0.436
Seattle, WA	1.16	565,809	67.9	7.5	56,319	13	0.602	0.495
Boston, MA	1.59	600,980	50.0	22.2	48,729	20	0.711	0.530
Denver, CO	1.74	576,842	50.5	9.7	43,748	18	0.646	0.504
Correlation Coefficient [*]		0.04	0.02	0.07	–0.43	0.29	0.42	0.25

^{*} Correlations between the rate ratio and the 7 ecological variables. Bolded coefficients are statistically significant ($p < 0.05$).

income ($r = -0.43$, $p = 0.037$) and the IOD ($r = 0.42$, $p = 0.039$) were significantly correlated with the RR.

Fig. 1 displays the rate ratios along the y-axis and the ascending Index of Disparity along the x-axis. As can be seen there is a slightly upward trend in the data suggesting a moderate relationship between these two variables, as is consistent with the $r = 0.42$ noted above.

4. Discussion

As far as we are able to determine, this is the first publication that has looked at city-level NHB:NHW breast cancer mortality disparities. Several insights emerge as a result of this analysis. We examined seven ecological variables as potential correlates of the rate ratio. It should be mentioned that the correlates were single measures at the city level, and not specific to each race within a city. Thus, a single indicator of income may conceal the degree of disparity between races within a city, with the exception of the segregation index. It is also important to emphasize that we are seeking correlates of the disparity and not simply of the rates. We emphasize this point since several of the variables we considered have been found to be predictors of *health* but few, to our knowledge, have been examined as predictors of *health disparities*, though there are some important exceptions [15,16]. In this sense, this analysis makes a unique contribution.

Only two of these seven variables were significantly related to the rate ratio: the median household income (negatively) and the Index of Dissimilarity (positively), a measure of segregation. MHHI was lowest for Detroit (\$29,100) and highest for San Jose (\$76,400) and then San Francisco (\$65,500). Notably, these three had the three lowest RRs, all less than 1.00. Poverty has, of course, frequently been found to be a risk factor for bad health [17,18]. Since Black people are more often poor it may be that poverty on a city level would exacerbate racial disparities although we have not been able to locate any studies of this topic.

The IOD indicates (in this usage) what proportion of NHB people would have to move to another census tract in order to achieve perfect integration with NHW people, or vice versa. This proportion is 86% for Chicago, 77% in Philadelphia and only 35% in El Paso. The reason the IOD is so small in the latter is likely because there are very few non-Hispanic Whites and non-Hispanic Blacks living there. In their classic study of segregation in the United States Massey and Denton found that large cities had an average IOD of 77% in 1980 [19]. Segregation has been linked to poor health for Black people, summarized by several reviews [20,21], and to disparities in health by a prominent analysis of the literature [22].

Notably, the Gini Index was not a significant predictor of the RR. This may represent reality or it may be a function of the fact that this index varies so little across the 24 cities, with a low of 0.43 in San Jose and a high of 0.54 in New York. Some studies have found significant relationships between economic inequality and health [10,23] but others have not [24]. A recent review summarizes this literature [25]. There are several measures of income inequality that could be used for such an analysis but in general they have been found to be highly correlated with one another [26] and the Gini Index is the most commonly employed measure [23]. Once again, we are not aware of any studies that have examined the impact of economic inequality in a geographical unit on racial disparities in that unit.

This disparity, like so many others, is literally a matter of life and death, generating annual NHB excess mortality of 42 in Memphis, 76 in Chicago and 1722 in the United States (Table 1).

4.1. The utility of such an analysis

The racial disparity in breast cancer mortality is widely discussed but geographic variation has generally been left out of

this discussion, although there are notable exceptions [24,27]. certainly would be possible to analyze disparities at other levels (e.g., state, zip code, metropolitan area or rural area) and each would have its advantages. For example, smaller scale analysis can reduce the confounding factors due to different geographic areas and larger scale analyses would cover greater geography. In this case we employed city-level disparities because it had not been done before, because many people identify at that level, and because important actions (interventions) are possible at the city-level, as discussed below in great detail, using Chicago as a case-study.

Since geographic analysis has by and large been omitted so have ecologic variables like the ones included in this analysis. This would seem like an important gap in the literature. For example, in the analysis presented here racial residential segregation (the IOD) is strongly correlated with the breast cancer mortality disparity. In a paper recently published by our group we presented a map of Chicago which indicated the 25 communities (out of 77) with the highest breast cancer mortality rates. They were almost all ($n = 24$) communities that were predominantly Black. We superimposed on this map those communities in which hospitals with American College of Surgeons approved cancer programs were located. There was virtually no overlap, suggesting a disconnect between communities most in need and those where services were geographically located, a disconnect defined by race [4]. Thus, what has been disclosed by the analysis in the current report is vividly illustrated by our map of Chicago. We wonder whether other cities are experiencing the same phenomenon, given the IOD findings here.

Consistent with this analysis is a call for further research guided by several of these findings. For example, cities with smaller disparities (e.g., San Francisco and Detroit) and those with larger disparities (e.g., Memphis and Denver) should look into these anomalous results. They may want to implement analyses of the determinants of these mortality rates involving individual level factors and how they vary by city. These may include incidence rates, proportions attending regular mammographic screening, proportions with health insurance, stage at diagnosis, breast cancer awareness, etc. Among the kinds of questions we can ask here are why the NHW rate is so high in Detroit and why the NHB rate is so low in San Francisco.

In cities in which the RR is particularly high or where individual rates are high, city-wide efforts are surely merited to attempt to reduce the racial disparity in breast cancer mortality. How “high” this RR should be in order to take action is of course subjective but one might use the RR for the US = 1.38 in 2005 [3] or 1.40 in 2007 [13] as an example or refer to Table 1 for other possibilities. For individual rates, the US rate or NHW rate for that location may be used as a gauge to identify what is ‘high’. The Task Force mobilization in the Chicago metropolitan area has thus far drawn a great deal of attention, funding and energy [4] and it would likely be helpful to generate efforts in similarly situated cities. Such organizing will hopefully improve equity in breast cancer outcomes. For example, the Task Force organized a demonstration of 500 people demanding increased funding for the Illinois Breast and Cervical Cancer Program which pays for mammograms, pap smears and treatment of these cancers for poor women [28].

Furthermore, the Task Force helped the passage of legislation to increase the Illinois Medicaid reimbursement rate for mammography to the Medicare rate, which represents a tripling of the reimbursement rate (Public Law 95-1045). The State of Illinois also decided to require health care providers, as a condition of receiving that increase, to submit mammography screening quality data to the Chicago Breast Cancer Quality Consortium. The Consortium is a project of the Task Force charged with bringing together health care providers to identify deficits

and engage in quality improvement interventions relating to breast cancer screening, diagnosis and treatment.

As a final observation here it should be mentioned that some breast cancers in NHB women may be of a more aggressive type (e.g., higher proportion of triple negatives) for which survival is poorer; but at the same time, the low RRs in some cities such as Baltimore or New York compared to that in other cities point to the fact that even if biological differences in tumor aggressiveness are present, they would not account for between cities differences. This would leave structural (e.g., racism and poverty) and access to care issues (e.g., early detection and treatment) as likely explanations [3,4].

4.2. Methodological considerations

This paper gains strength from the data sources employed. With respect to the national death certificate files that were employed, we have searched the literature and there is overwhelming agreement that the files are generally complete [13]. It is further likely that breast cancer mortality would be one of the least ambiguous death codes, as opposed to heart disease and diabetes, for example [13]. The numerators, drawn from the American Community Survey, are similarly robust, based as they are upon sample sizes in the millions [29].

Despite the fact that we have analyzed three-year average rates from the 24 largest cities in the United States, even these will vary over time and it could be that the next three years of data would produce some noticeably different figures. Thus, the data presented here should be seen as an exemplar of a process rather than a fixed set of rates.

Second, we have only dealt with non-Hispanic Black and non-Hispanic White women in this analysis. Clearly rates for other groups need to be analyzed as well. This begins to involve small numbers for some racial groups, like Native Americans, which would require a different strategy for analysis (e.g., perhaps using 5 or even 10 year averages). In addition, vital records data reveal very low breast cancer mortality rates for Hispanic women [13]. Since mammography rates are lower for this group [30] and other studies reveal less than optimal treatment for Hispanic women [31], the explanation of these low mortality rates almost certainly stems from the fact that many Mexicans return home when they become chronically ill, thus not generating a US death certificate with a diagnosis of breast cancer (sometimes referred to as the "salmon hypothesis") [32,33].

5. Conclusion

National and state breast cancer mortality rates are informative. Yet rates for smaller geographies are necessary to identify disparities at the local level and help facilitate community engagement and organizing for improved health [34]. An ideal local level for breast cancer analysis may be the city since smaller units will have too few events for stable calculations. For the reasons noted above, we recommend that such municipalities compute these rates and rate ratios and open a discussion about disparities in breast cancer mortality in their communities. There is much to be gained and little to lose by doing this.

Conflict of interest statement

None of the three authors have any financial and personal relationships with other people or organizations that could inappropriately influence (bias) our work.

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Attachment 7

ACR Accreditation Program Requirements

Radiation Oncology Practice Accreditation Program Requirements



Introduction

The radiation oncology practice accreditation program provides radiation oncologists with third party, impartial peer review and evaluation of patient care. The facility's personnel, equipment, treatment planning and treatment records, as well as patient safety policies, quality control/quality assessment activities are assessed. Recommendations for improvement are based on nationally recognized guidelines, including ACR and ASTRO guidelines and technical standards, and the American Association of Physics in Medicine (AAPM) Task Group reports.

The ACR Committee for Radiation Oncology Practice Accreditation directs the program. The accreditation process, designed to promote quality and be educational in nature, includes an on-site survey performed by board certified radiation oncologists and board certified medical physicists.

Application for Accreditation

Each facility applying for accreditation must submit an application through the secure website, <https://ropa.acr.org>. The application consists of submission of facility treatment and equipment information, staffing levels and qualifications, and physics Quality Assurance/Quality Control documentation. If deficiencies are noted or missing items identified, the facility will be contacted so that any missing items can be submitted before the site survey is scheduled. When the application is complete, the date (s) of the survey will be confirmed. At this time, the facility will receive a notice to submit cases (Census Data Form) from which 10 (or more) will be selected for review during the site visit.

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Case Review

When your survey date is confirmed, you will receive an e mail asking you to submit cases of *definitively treated* patients who have *recently completed treatment* at your facility and have had at least *one follow up visit*. Please submit your cases *no later than 30 days prior* to the survey date. During the on-site survey, 10 cases will be reviewed. For multi-site surveys, 10 cases will be reviewed at the main site and at least 3-4 cases at each satellite. For multi-site surveys, you only need to submit 2-3 cases from each disease site for each satellite. To ensure that all physicians in the practice are reviewed, physician initials must be included with patient ID numbers. A minimum of 2 cases per physician will be reviewed. ID numbers, not patient names, must be submitted for 5 breast, 5 prostate, 5 head and neck, 5 lung and 5 “generic” disease sites (colo-rectal, seminoma, brain, Hodgkin’s disease, cervix, etc) on the census data sheets provided. If you do not have 5 cases from a disease site (such as head and neck), you may submit additional generic cases. In addition, cases selected should include all treatment modalities offered at your facilities, such as IMRT, prostate seed implant, stereotactic radiosurgery, etc. For all cases, patient records including simulation information, DRRs, port films (hard copies if appropriate), and CT planning documentation must be available for the surveyors. If your facility has electronic images and/or medical records, you will need to provide electronic access to this information. Since the data collection on site is performed using a web-based process, the surveyors will need **internet access**. We request that you provide a minimum of 2 computers with 4 monitors so that the surveyors can review your electronic records as well as access the internet for data entry purposes. We also ask that you provide staff members (dosimetrist, physicist) to give a brief orientation to your electronic medical records/digital imaging systems and to be available throughout the day to provide assistance as needed. A member of the ACR staff will contact you prior to the survey for details such as parking, directions to site, day of survey agenda, etc.

On-Site Survey

The on-site survey is conducted over one business day (for a single facility). Multi-site surveys will require more days, based on the number of sites, geographic locations and practice patterns. During the visit, the surveyors will tour the facility, verify the information submitted in the facility’s application, conduct an interview with the Chief/Medical Director of Radiation Oncology, the chief physicist, department administrator/chief therapist, dosimetrist, nurse and other key personnel; and collect information about the facility’s patient treatment policies and procedures, safety initiatives and review the selected cases.

The radiation oncologist and medical physicist review charts and complete a set of questions developed by the Committee for Radiation Oncology Practice Accreditation. Chart reviews include components such as complete and signed prescriptions, consent forms, pathology reports, history and physical, physician management during treatment and follow up, appropriateness of treatment, simulation/treatment planning and dosimetry activities. At the end of the day, the surveyors will again meet with the group for a brief “exit” interview. This is primarily to clarify any issues prior to their departure; the team will not be providing their recommendations at this time since that is a Committee decision made following review of the results of the survey. For multi-site surveys, the exit interview time and place will be determined with ACR and facility staff.

A comprehensive review of the facility's physics program will be included as part of the application process and verified during the on-site survey. The Radiation Oncology Physicist is responsible for the design and implementation of the physics quality management program. The following areas will require documentation submitted with the application:

- Documentation of compliance with AAPM TG-40, TG 142, TG-51
- Documentation of treatment planning system quality assurance program TG- 53
- Independent Verification of Output of each beam

In addition, during the on-site survey, the qualified medical physicist's documentation of the following will be reviewed:

- Procedures for instrument calibration and periodic instrument constancy checks
- Procedures to verify the manufacturer's specifications and to establish baseline performance values for radiation therapy equipment
- Quality management program for radiation therapy equipment, simulators, treatment planning systems, and monitor unit calculation algorithms
- Monitor units calculation procedures and protocols
- Physics chart check protocol for reviewing treatment delivery
- Procedures for checking the integrity of mechanical and electrical patient care devices
- Radiation protection program as it pertains to radiation oncology
- Calculations related to patient dosimetry and/or physics measurements when such needs arise or per clinician's requests.

Random On-Site Surveys

In order to verify that accredited facilities maintain consistent quality during the three-year accreditation period, on-site surveys may also be performed at any time during the accreditation period. These surveys provide an excellent opportunity for a positive educational exchange with experts in the field, as well as providing validation of continued compliance with ACR guidelines and standards. These surveys will be conducted by radiation oncologists and medical physicists from the Radiation Oncology Practice Accreditation Program. Any facility chosen for a random on-site survey will be notified in advance. There is no additional cost to the facility for the random survey.

Multiple Sites

A practice that has multiple sites may be eligible for a single survey, with a limited case review from each additional site. The criteria to determine eligibility include but are not limited to:

- The physician group has a single medical director
- The physicist group has a single director
- Physicians' peer review includes all the practice sites
- All practice sites utilize uniform treatment methods
- All practice sites have uniform chart organization and forms
- Geographic accessibility (**within one hour drive from main site**)

If the practice does not meet the criteria, a full survey will be required for each site.

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Personnel Qualifications

Radiation Oncologist

- Certification in Radiology by the American Board of Radiology (ABR) of a physician who confines his/her professional practice to radiation oncology or certification in Radiation Oncology or Therapeutic Radiology by the ABR, the American Osteopathic Board of Radiology, the Royal College of Physicians and Surgeons of Canada, or the Collège des Médecins du Québec may be considered proof of adequate physician qualifications.

OR

- Satisfactory completion of a radiation oncology residency program approved by the American Council of Graduate Medicine Education (ACGME), the Royal College of Physicians and Surgeons of Canada (RCPSC), the Collège des Médecins du Québec, or the American Osteopathic Association (AOA).

Qualified Medical Physicist

The ACR strongly recommends that the individual be certified in the appropriate subfield (s) by the American Board of Radiology (ABR), the Canadian College of Physics in Medicine, or by the American Board of Medical Physics (ABMP). The appropriate subfield of medical physics for this guideline is Therapeutic Medical Physics. (Previous medical physics certification categories including Radiological Physics and Therapeutic Radiological Physics are also acceptable.)

Radiation Therapists and Simulation Staff

Radiation therapists and simulation staff should fulfill state licensing requirements, and treating radiation therapists should have American Registry of Radiologic Technologists (ARRT) certification in radiation therapy. Simulation staff should have ARRT certification in either radiation therapy or diagnostic imaging.

Dosimetrist

Certification by the Medical Dosimetrist Certification Board is recommended.

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Staffing Levels*

In the final report, the facility's staffing levels for radiation oncologists, physicists, radiation therapists and dosimetrists are compared to the accredited facility averages and averages for the facility's stratum as defined in the following table. The table allows facilities to identify personnel and equipment utilization issues. Staffing recommendations may be part of the final report; however, variations from these levels generally do not result in withholding of accreditation unless inadequate staffing levels result in non-compliance with ACR Practice Guidelines and Technical Standards and/or compromise patient safety.

The strata are defined as:

Academic/CCC Comprehensive Cancer Center or main teaching hospital of a medical school

H1 Hospital based; 600 or more patients

F1 Freestanding; 600 or more patients

H2 Hospital based; 201-599 patients

F2 Freestanding; 201-599 patients

H3 Hospital based; 200 or fewer patients

F3 Freestanding; 200 or fewer patients

	ALL ACCREDITED FACILITIES	ACADEMIC / CCC	H1	H2	H3	F1	F2	F3
New patients/ radiation oncologist	205	156	278	215	140	203	238	160
New patients/ Physicist	265	174	273	257	246	277	321	256
New patients/ FTE dosimetrist	273	265	346	275	196	318	301	211
New patients/ FTE therapist	74	65	90	73	56	70	81	75
FTE therapist/ Rx machine	3.1	4.1	3.6	3.1	2.6	3.4	3.1	2.2
New patients/ Rx machines	215	222	305	222	133	236	245	143

**While it may be instructive to compare staffing data to the facility's stratum and to the national average for accredited facilities, note that this data is incomplete in some important aspects. The data does not account for the staff's other duties (e.g. simulation for therapists) nor is the data scaled for complexity or the proportion of different pathologies treated in any given clinic. Each facility should, when comparing their staffing data to stratum and national averages, consider their patient population, range and complexity of services provided, and any staff duties outside of the core duties assumed in this data table.*

Continuous Quality Improvement (CQI)

The Medical Director of Radiation Oncology will be responsible for the institution and ongoing supervision of the continuous quality improvement program. Elements of the program include:

- Chart review is required and should include cases in which there is a variation from prescription of greater than 10% of intended total dose, new modalities or techniques, and charts in which an incident report is filed
- Morbidity and mortality review
- Review of internal outcome studies which include radiation oncology patients
- Focus studies (Facility Practice Improvement)
- Individual physician/physicist peer review
- Patient satisfaction surveys
- New patient conferences
- Port film/image review
- Chart rounds

Frequent Deficiencies

The following are recommendations that are *frequently* included in the final report and must be addressed before a facility will be granted accreditation. Please note that other serious deficiencies, *not* seen frequently and therefore not listed, may also require corrective action and documentation prior to granting of accreditation.

- The treatment prescriptions should include: volume (site) to be treated, description of ports (i.e., AP, PA, lateral, etc.), radiation modality, dose per fraction, number of fractions per day, number of fractions per week, total number of fractions, total tumor dose and prescription point or isodose.
- Port verification films/images should be taken at the beginning of therapy, with field changes, and at least every other 5-10 treatments. All images should be labeled with the patient's name, date taken, field size, and direction of the beam as well as the reviewing radiation oncologist's initial/signature and date. IMRT - confirmation of patient positioning should be performed initially and then periodically, at least weekly, throughout the course of the patient's treatment.
- At the completion of treatment, the qualified medical physicist shall review the entire chart to affirm the fulfillment of the initial and/or revised prescription dose. The review should be documented by the physicist, initialed/signed and dated **no later than one week** after the end of treatment.
- Each patient chart should contain a documented, comprehensive history and physical examination performed by the radiation oncologist, including a comprehensive history of the present illness, past medical history, review of systems, review of imaging studies and laboratory data, histopathology diagnosis and recommendations for treatment.

- The department should have a documented, formal treatment planning system quality assurance plan, including the periodic confirmation of the treatment planning system consistency.
- Patients should be evaluated by the radiation oncologist at least weekly. Weekly exams should be thoroughly documented in the patient chart.
- A radiation oncologist should be available for direct care and quality review on a daily basis. The radiation oncologist, facility, and support staff should be available to initiate urgent treatment within a medically appropriate response time on a 24-hour basis or refer to a facility that is available to treat on a 24-hour basis. When unavailable, the radiation oncologist is responsible for arranging appropriate coverage. A radiation oncologist's availability should be consistent with state and federal requirements.
- At the completion of treatment, a follow-up plan should be documented in the patient chart, and patients should be seen by the radiation oncologist at regular, on-going intervals. Follow-up notes should be documented in the patient record.
- Complete documentation should be included in the patient record when brachytherapy is performed. Written directives documented for each procedure should include the treatment site, isotope, number of sources and the planned dose to designated points. After brachytherapy is completed, a written summary of treatment delivery should include: total dose of brachytherapy and external beam therapy, time of source insertion and removal and documentation of a radiation safety survey of the patient and room.
- Documentation of delivered doses to volumes of target and non-target tissues, in the form of dose volume histograms and representative cross-sectional isodose treatment diagrams, should be maintained in the patient's written or electronic record.
- Physician peer review activities should be formalized and documented.
- Formal Quality Assurance & Improvement program should include: chart rounds, new patient rounds, and morbidity and mortality conferences.
- IMRT QA should be documented and approved prior to initiation of treatment.
- The responsibilities of the radiation oncologist shall be clearly defined and should include the following:
Define the goals and requirements of the treatment plan, including the specific dose constraints for the target(s) and nearby critical structure(s).

Final Report

The report is issued to the radiation oncologist who requested the survey. The Committee issues a final report after the on-site survey. The report is generally sent within 8-12 weeks following the on-site survey. The report is based on the findings of the surveyors, as well as information provided in the initial application and verified by the surveyors. The accreditation report includes:

- Comparison of facility/staffing data with the accredited facilities data.

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- Evaluation of facility's compliance with guidelines and standards from application information and review by surveyors.
- Surveyor comments on individual case reviews.
- Specific recommendations for improvement.

Accreditation Status

The term of accreditation is three years. Facilities that are not granted accreditation will either be:

- Deferred with 90 days to submit a Corrective Action Plan. After the Corrective Action Plan is approved by the Committee, the facility may be required to perform a self audit (measures for self audit will be selected by the Committee) and submit the results no later than 6 months after receipt of response to corrective action. Following Committee approval of the self-audit, the facility may be granted a 3 year accreditation. The Committee may request a re-survey if Corrective Action Plan is approved. Additional fees may be applied such as On-Site Surveyors' expenses including travel and lodging.
- Denied with 90 days to submit a Corrective Action Plan. After the Corrective Action Plan is approved by the Committee, the facility will be required to participate in a follow up survey (6-9 months after receipt of response to corrective action). A re-application fee of \$5,000 must be submitted with the survey agreement. The surveyors will complete a report of their findings which will be reviewed by the Committee. Following Committee approval of this report, the facility may be granted a 3 year accreditation.

Marketing Your Accreditation

Once accreditation has been achieved, the facility will receive a marketing package (link to documents is included in your final report) to assist in promoting this success within the community. In addition, all sites fully accredited (and those under review) will be listed by program and state on the ACR Web site at www.acr-org.

The marketing tools include:

- Camera-ready ad
- Press release
- Certificate suitable for framing
- Certification mark provided in decal and electronic format

Application for Renewal

The application process for sites applying for renewal is essentially the same as for new sites, however, a facility's previous recommendations will be carefully reviewed to ensure that recommendations for improvement have been implemented. In order to maintain accreditation, it is recommended that facilities begin the application process nine months prior to the expiration date of their accreditation.

Appeal Mechanism

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An appeal process is available to a radiation oncology facility that disagrees with the accreditation report. To appeal, the chief of radiation oncology submits a written request to the Chairman of the Committee on Radiation Oncology Practice Accreditation within thirty days of receipt of the accreditation report.

Survey Fees

Survey fee for the main facility is \$9,500.00; \$3,000.00 for each additional site. **Fees are non-refundable and subject to change without notice.** If a facility is denied accreditation and required to participate in a follow up survey, a fee of \$5000 must be submitted prior to scheduling the site visit. Checks should be made payable to The American College of Radiology.

Effective on August 5, 2013: Any requested change in the survey date by the facility or cancellation of a scheduled survey after ACR has invested funds in the survey (such as travel funds) must be reimbursed by the facility in addition to the survey fee.

Practice Guidelines and Technical Standards

We highly recommend that you become familiar with the ACR Practice Guidelines and Technical Standards. These serve as the foundation for each of our accreditation programs and may be accessed by both ACR members and non-members through our Web site at www.acr.org.

R-O PEER™

R-O PEER offers radiation oncologists the opportunity to fulfill Part IV, Evaluation of Performance in Practice for Maintenance of Certification (MOC), for the American Board of Radiology (ABR) through the Radiation Oncology Practice Accreditation Program. R-O PEER™, the ACR's Practice Quality Improvement (PQI) program is offered as part of the Radiation Oncology Practice Accreditation Program. Following the survey, a final report will be issued to each participating radiation oncologist. If any corrective action measures are identified, the final report will request additional documentation that demonstrates that these have been appropriately addressed. When this documentation is submitted and reviewed, a certificate of satisfactory completion of the PQI project will be issued.

For information on R-O PEER and to access the application, visit the ACR web site at <http://www.acr.org/Quality-Safety/Accreditation/RO>

For Additional Information

Contact the ACR Radiation Oncology Practice Accreditation Program office in Reston, Virginia at 800-770-0145 or rad-onc-accred@acr.org.

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APPENDIX A

The following list of references is by no means complete, but it may be used as a starting point to assist you with your application and survey process:

American College of Radiology Practice Guidelines and Technical Standards, Reston, VA

<http://www.acr.org/Quality-Safety/Standards-Guidelines/Practice-Guidelines-by-Modality/Radiation-Oncology>

<http://www.acr.org/Quality-Safety/Standards-Guidelines/Technical-Standards-by-Modality>

American Association of Physicists in Medicine, (AAPM). Comprehensive QA for Radiation Oncology: Report of AAPM Radiation Therapy Committee Task Group 40, 1994.

American Association of Physicists in Medicine, (AAPM). Task Group 142 Report, Quality Assurance of Medical Accelerators, 2009.

American Association of Physicists in Medicine, (AAPM). Protocol for clinical reference dosimetry of high-energy photon and electron beams. Report of AAPM Radiation Therapy Task Group 51, 1999.

American Association of Physicists in Medicine, (AAPM). Quality Assurance for Clinical Radiotherapy Treatment Planning Report of AAPM Radiation Therapy Committee Task Group 53, 1998.

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Attachment 9

Demographic Chart for Service Area

Demographic Chart - Methodist Service Area

	Shelby County	Fayette County	Tipton County	DeSoto County	Marshall County	Crittenden County	Service Area	Tennessee
Current Year (CY), Age 65+	106,233	6,298	7,495	18,606	5,039	5,839	149,510	939,436
Projected Year (PY), Age 65+	129,053	7,417	8,898	22,475	5,674	6,573	180,090	1,104,190
Age 65+, % Change	21%	18%	19%	21%	13%	13%	20%	18%
Age 65+, % Total (PY)	13%	19%	14%	13%	16%	13%	14%	17%
CY, Total Population	943,588	38,617	61,519	167,335	36,340	50,052	1,297,451	6,469,063
PY, Total Population	971,931	39,169	62,561	175,657	35,335	49,201	1,333,854	6,678,670
Total Pop. % Change	3%	1%	2%	5%	-3%	-2%	3%	3%
TennCare Enrollees	227,649	5,604	11,511	---	---	---	244,764	1,193,721
TennCare Enrollees as a % of Total Population	24%	15%	19%	---	---	---	19%	18%
Median Age	35.1	42.3	36.9	35.7	38.4	34.4	35.5	38.6
Median Household Income	\$ 46,102	\$ 57,437	\$ 50,869	\$ 59,734	\$ 33,279	\$ 35,264	---	\$ 43,989
Population % Below Poverty Level	20.1%	11.7%	15.3%	9.5%	24.2%	27.9%	---	16.9%

Sources: Truven Healthcare Analytics- Market Expert (Claritas/Census Data) 2013 and 2018, Bureau of TennCare Enrollment Data 2013 and Census Bureau Quick Facts

Attachment 14

Copy of Notice of Intent and Publication Affidavit

Attachment 15

Letters of Support



SUPPLEMENTAL- # 1

November 25, 2013

11:00am

A C WHARTON, JR.
MAYOR

November 7, 2013

Ms. Melanie Hill
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

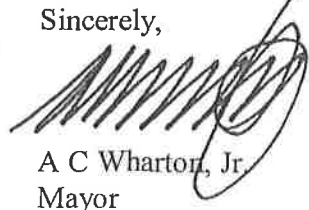
Dear Ms. Hill:

As the Mayor of the City of Memphis, I support the CON request of the West Cancer Center in partnership with the University of Tennessee Health Science Center, The West Clinic and Methodist Healthcare.

Memphis, Shelby County has cancer incidence and mortality rates higher than national averages particularly in breast, colon/rectal and prostate cancers. Even more significant, African Americans die disproportionately (at rates 1.5 times higher) from cancer in Shelby County when compared to Caucasians. Our city has a population of approximately 1 million people which is projected to grow and age as the baby boomers reach retirement. In direct proportion, sadly the anticipated number of cancer patients in the community is expected to grow with the aging population.

Methodist Le Bonheur Healthcare, The West Clinic and the University of Tennessee Health Science Center (UTHSC) entered into a partnership in January 2012 to transform cancer care in the Mid-South. The resources of each partner will significantly help cancer patients in our community beginning with this improved capital collaboration among specialties to provide seamless care and allow cancer patients to receive services at one site of care thereby eliminating transportation challenges. Thus, please accept this letter as my wholehearted support of the Certificate of Need (CON) request to consolidate existing services from multiple sites into one existing building in order to increase efficiencies and integration.

Sincerely,



A C Wharton, Jr.
Mayor

SUPPLEMENTAL- # 1**November 25, 2013****11:00am**

3400 Players Club Parkway, Suite 140
Memphis, TN 38125
(901) 748-4128

November 8, 2013

Melanie Hill
Health Services Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, TN 37243

Dear Ms. Hill:

Cigna is pleased to support Methodist LeBonheur Healthcare, the West Cancer Center and the University of Tennessee Health Science Center's proposal to consolidate sites of service within the Memphis area. With the higher incidence of cancer amongst the citizens of Memphis, the need to streamline cancer care and improve cost management, the consolidation proposal meets numerous objectives:

- Consolidates existing services in multiple locations into one existing building; keeping costs down while increasing efficiencies and integration.
- Eliminates the fractionization of cancer care, allowing patients to receive services at one site of care instead of traveling back and forth to multiple locations.
- Improves patients and families' ability to navigate the complex cancer care system utilizing an integrated and coordinated care journey.
- Helps to reduce disparities in care that are caused in part by transportation challenges of multiple appointments in multiple locations.
- Improves collaboration amongst multiple specialties and provides seamless care delivery.
- Integrated care delivery for cancer services will enhance collaboration with payers for innovative reimbursement and value based models such as episodes of care, bundled payments and an oncology medical home.

Cigna supports this effort in order to achieve all of these valuable and important objectives. Please contact me if you have any questions or if I may be of further assistance.

Sincerely,

Chuck Utterback
Director of Contracting

November 25, 2013

11:00am

**of Tennessee**

plans for better health. plans for a better life.™

1 Cameron Hill Circle
Chattanooga, TN 37402

bcbst.com

Bill Gracey
President & Chief Executive Officer
1 Cameron Hill Circle
Chattanooga, Tennessee 37402

November 15, 2013

Ms. Melanie Hill
Executive Director
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243***Re: The West Cancer Center Certificate of Need Application***

Dear Ms. Hill,

This letter is submitted in support of the West Cancer Center Certificate of Need application which has been filed with your agency.

As the state's largest health insurance company, BlueCross BlueShield of Tennessee believes strongly in the need for our state's health care community to be equipped and organized to meet the changing health care needs of the people we serve. This includes supporting innovative, clinically proven models of care which improve quality and outcomes and help reign in the cost of care. The proposed West Cancer Center will be a critical component in ensuring quality of care, improved outcomes and cost containment for cancer patients in the region.

The West Cancer Center will provide access to multidisciplinary clinics for cancer care patients and will offer specialized medical, surgical, diagnostic and radiation programs in a patient's own community. Doing so means patients will be able to receive services at one site of care instead of traveling between disconnected, separate facilities during diagnosis and treatment.

Integrating sites of service for imaging, chemotherapy, surgery and other therapies and counseling will also improve patients' and families' ability to navigate the complex health care delivery system. This approach helps reduce disparities in care that can result from transportation and other coordination challenges that are associated with multiple locations of care. Importantly, this consolidation of services into a single site also improves collaboration among multi-specialty health care professionals and provides seamless delivery of care to the patient. Doing so will help keep costs lower while increasing efficiencies and further integrating services, all of which benefit the patient.

All of these improvements are consistent with what we see happening across the industry: increased collaboration that improves the quality of care and clinical outcomes, reduces costs, and improves the patient experience.

November 25, 2013**11:00am**

Shelby County already experiences cancer incidence and mortality rates that are higher than national averages, particularly in breast, colon/rectal and prostate cancers. And these rates are projected to increase with the aging population. Even more significantly, African Americans die disproportionately from cancer in Shelby County when compared to Caucasians.

For these reasons, and because the West Cancer Center will bring improved care delivery, increased efficiency, better health outcomes and reduced costs, I strongly encourage the Agency and its members to approve this application.

Thank you for your consideration of this application and for your service to our state's health care community.

Sincerely,

A handwritten signature in dark ink, appearing to read "Bill Gracey", written in a cursive style.

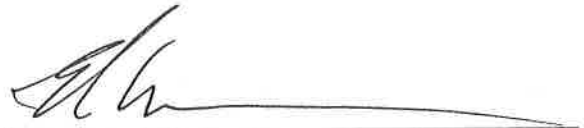
Bill Gracey
President & CEO

AFFIDAVIT

STATE OF TENNESSEE

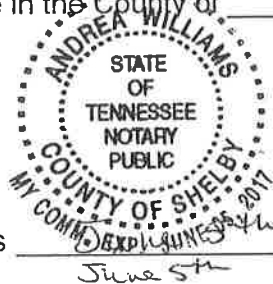
COUNTY OF ShelbyNAME OF FACILITY: Methodist Healthcare - Memphis Hospitals
West cancer Center

I, Erich Mounce, after first being duly sworn, state under oath that I am the applicant named in this Certificate of Need application or the lawful agent thereof, that I have reviewed all of the supplemental information submitted herewith, and that it is true, accurate, and complete.



Signature/Title

Sworn to and subscribed before me, a Notary Public, this the 19th day of November, 2013, witness my hand at office in the County of Shelby, State of Tennessee.

Andrea Williams
NOTARY PUBLIC

My commission expires June 5th, 2017.

COPY- SUPPLEMENTAL-2

Memphis Hosp. West Cancer Ctr.

CN1311-043

207
TRAUGER & TUKE
ATTORNEYS AT LAW
THE SOUTHERN TURF BUILDING
222 FOURTH AVENUE NORTH
NASHVILLE, TENNESSEE 37219-2117
TELEPHONE (615) 256-8585
TELECOPIER (615) 256-7444

SUPPLEMENTAL- # 2

**November 27, 2013
11:35am**

November 27, 2013

VIA HAND DELIVERY

Ms. Melanie Hill
Executive Director
State of Tennessee
Health Services & Development Agency
502 Deaderick Street, 9th Floor
Nashville, TN 37243

RE: Response to Supplemental Questions #2 to Methodist Healthcare –
Memphis Hospitals West Cancer Center Certificate of Need – CN1311-043

Dear Ms. Hill,

Enclosed please find a Supplemental Response #2, in triplicate, to be filed on behalf of my client Methodist Healthcare - Memphis Hospitals West Cancer Center. Please date stamp the additional enclosed copy of the Response and return it to me.

Thank you for your assistance.

Very truly yours,

Byron R. Trauger
Byron R. Trauger *Kmn*

BRT:kmn

Enclosures

Cc: Carol Weidenhoffer (via email)

**METHODIST HEALTHCARE –
MEMPHIS HOSPITALS**

SUPPLEMENTAL RESPONSE #2

CN1311-043

**THE WEST CANCER CENTER –
AN INTEGRATED COMPREHENSIVE
CANCER CENTER**

MEMPHIS, SHELBY COUNTY

Filed November 2013

1. Section C, Need, Item 1.a. (Service Specific Criteria (Megavoltage Radiation Therapy Services) Item 6.e.

The American College of Radiology Radiation Oncology Practice Accreditation Program Requirements in Attachment 7 is noted. However, please expand on how the applicant plans to meet the MRT Unit staffing requirements as set forth by this accrediting authority.

Based on the attached ACR Requirements – see page 5 of the guidelines. The West Cancer Center will be an F1. ACR does not look at the billing of services to determine whether a site is Hospital-based or Freestanding. It is literally whether the center is on a hospital campus or not and the proposed center will be Freestanding with more than 600 new patients. So the F1 Standard applies.

West Cancer Center is already working towards meeting the goals for the existing center. Methodist will add the following FTEs and with such will meet the ACR staffing requirements at this site

- :
- 1) We have hired a new Radiation Oncologist and he starts January 1, 2014.
 - 2) We are hiring a masters level physicist and will increase the number of physicists to 4.0 FTEs by 2016.
 - 3) We meet the dosimetrist goals now and will with projected volumes.
 - 4) We have hired an additional therapist and will be at 7.0 FTEs by 2016 to meet the goals.
 - 5) The additional therapist referenced in #4 above will meet this goal.
 - 6) We currently exceed this metric for new patients per machine. This is one reason we are requesting a new machine. The second machine will align the center with this benchmark.

Attachment 1

ACR Accreditation Program Requirements

Radiation Oncology Practice Accreditation Program Requirements



Introduction

The radiation oncology practice accreditation program provides radiation oncologists with third party, impartial peer review and evaluation of patient care. The facility's personnel, equipment, treatment planning and treatment records, as well as patient safety policies, quality control/quality assessment activities are assessed. Recommendations for improvement are based on nationally recognized guidelines, including ACR and ASTRO guidelines and technical standards, and the American Association of Physics in Medicine (AAPM) Task Group reports.

The ACR Committee for Radiation Oncology Practice Accreditation directs the program. The accreditation process, designed to promote quality and be educational in nature, includes an on-site survey performed by board certified radiation oncologists and board certified medical physicists.

Application for Accreditation

Each facility applying for accreditation must submit an application through the secure website, <https://ropa.acr.org>. The application consists of submission of facility treatment and equipment information, staffing levels and qualifications, and physics Quality Assurance/Quality Control documentation. If deficiencies are noted or missing items identified, the facility will be contacted so that any missing items can be submitted before the site survey is scheduled. When the application is complete, the date (s) of the survey will be confirmed. At this time, the facility will receive a notice to submit cases (Census Data Form) from which 10 (or more) will be selected for review during the site visit.

Case Review

When your survey date is confirmed, you will receive an e mail asking you to submit cases of ***definitively treated*** patients who have ***recently completed treatment*** at your facility and have had at least ***one follow up visit***. Please submit your cases ***no later than 30 days prior*** to the survey date. During the on-site survey, 10 cases will be reviewed. For multi-site surveys, 10 cases will be reviewed at the main site and at least 3-4 cases at each satellite. For multi-site surveys, you only need to submit 2-3 cases from each disease site for each satellite. To ensure that all physicians in the practice are reviewed, physician initials must be included with patient ID numbers. A minimum of 2 cases per physician will be reviewed. ID numbers, not patient names, must be submitted for 5 breast, 5 prostate, 5 head and neck, 5 lung and 5 “generic” disease sites (colo-rectal, seminoma, brain, Hodgkin’s disease, cervix, etc) on the census data sheets provided. If you do not have 5 cases from a disease site (such as head and neck), you may submit additional generic cases. In addition, cases selected should include all treatment modalities offered at your facilities, such as IMRT, prostate seed implant, stereotactic radiosurgery, etc. For all cases, patient records including simulation information, DRRs, port films (hard copies if appropriate), and CT planning documentation must be available for the surveyors. If your facility has electronic images and/or medical records, you will need to provide electronic access to this information. Since the data collection on site is performed using a web-based process, the surveyors will need **internet access**. We request that you provide a minimum of 2 computers with 4 monitors so that the surveyors can review your electronic records as well as access the internet for data entry purposes. We also ask that you provide staff members (dosimetrist, physicist) to give a brief orientation to your electronic medical records/digital imaging systems and to be available throughout the day to provide assistance as needed. A member of the ACR staff will contact you prior to the survey for details such as parking, directions to site, day of survey agenda, etc.

On-Site Survey

The on-site survey is conducted over one business day (for a single facility). Multi-site surveys will require more days, based on the number of sites, geographic locations and practice patterns. During the visit, the surveyors will tour the facility, verify the information submitted in the facility’s application, conduct an interview with the Chief/Medical Director of Radiation Oncology, the chief physicist, department administrator/chief therapist, dosimetrist, nurse and other key personnel; and collect information about the facility’s patient treatment policies and procedures, safety initiatives and review the selected cases.

The radiation oncologist and medical physicist review charts and complete a set of questions developed by the Committee for Radiation Oncology Practice Accreditation. Chart reviews include components such as complete and signed prescriptions, consent forms, pathology reports, history and physical, physician management during treatment and follow up, appropriateness of treatment, simulation/treatment planning and dosimetry activities. At the end of the day, the surveyors will again meet with the group for a brief “exit” interview. This is primarily to clarify any issues prior to their departure; the team will not be providing their recommendations at this time since that is a Committee decision made following review of the results of the survey. For multi-site surveys, the exit interview time and place will be determined with ACR and facility staff.

November 27, 2013

11:35am

A comprehensive review of the facility's physics program will be included as part of the application process and verified during the on-site survey. The Radiation Oncology Physicist is responsible for the design and implementation of the physics quality management program. The following areas will require documentation submitted with the application:

- Documentation of compliance with AAPM TG-40, TG 142, TG-51
- Documentation of treatment planning system quality assurance program TG- 53
- Independent Verification of Output of each beam

In addition, during the on-site survey, the qualified medical physicist's documentation of the following will be reviewed:

- Procedures for instrument calibration and periodic instrument constancy checks
- Procedures to verify the manufacturer's specifications and to establish baseline performance values for radiation therapy equipment
- Quality management program for radiation therapy equipment, simulators, treatment planning systems, and monitor unit calculation algorithms
- Monitor units calculation procedures and protocols
- Physics chart check protocol for reviewing treatment delivery
- Procedures for checking the integrity of mechanical and electrical patient care devices
- Radiation protection program as it pertains to radiation oncology
- Calculations related to patient dosimetry and/or physics measurements when such needs arise or per clinician's requests.

Random On-Site Surveys

In order to verify that accredited facilities maintain consistent quality during the three-year accreditation period, on-site surveys may also be performed at any time during the accreditation period. These surveys provide an excellent opportunity for a positive educational exchange with experts in the field, as well as providing validation of continued compliance with ACR guidelines and standards. These surveys will be conducted by radiation oncologists and medical physicists from the Radiation Oncology Practice Accreditation Program. Any facility chosen for a random on-site survey will be notified in advance. There is no additional cost to the facility for the random survey.

Multiple Sites

A practice that has multiple sites may be eligible for a single survey, with a limited case review from each additional site. The criteria to determine eligibility include but are not limited to:

- The physician group has a single medical director
- The physicist group has a single director
- Physicians' peer review includes all the practice sites
- All practice sites utilize uniform treatment methods
- All practice sites have uniform chart organization and forms
- Geographic accessibility (**within one hour drive from main site**)

If the practice does not meet the criteria, a full survey will be required for each site.

Personnel Qualifications

Radiation Oncologist

- Certification in Radiology by the American Board of Radiology (ABR) of a physician who confines his/her professional practice to radiation oncology or certification in Radiation Oncology or Therapeutic Radiology by the ABR, the American Osteopathic Board of Radiology, the Royal College of Physicians and Surgeons of Canada, or the Collège des Médecins du Québec may be considered proof of adequate physician qualifications.

OR

- Satisfactory completion of a radiation oncology residency program approved by the American Council of Graduate Medicine Education (ACGME), the Royal College of Physicians and Surgeons of Canada (RCPSC), the Collège des Médecins du Québec, or the American Osteopathic Association (AOA).

Qualified Medical Physicist

The ACR strongly recommends that the individual be certified in the appropriate subfield (s) by the American Board of Radiology (ABR), the Canadian College of Physics in Medicine, or by the American Board of Medical Physics (ABMP). The appropriate subfield of medical physics for this guideline is Therapeutic Medical Physics. (Previous medical physics certification categories including Radiological Physics and Therapeutic Radiological Physics are also acceptable.)

Radiation Therapists and Simulation Staff

Radiation therapists and simulation staff should fulfill state licensing requirements, and treating radiation therapists should have American Registry of Radiologic Technologists (ARRT) certification in radiation therapy. Simulation staff should have ARRT certification in either radiation therapy or diagnostic imaging.

Dosimetrist

Certification by the Medical Dosimetrist Certification Board is recommended.

Staffing Levels*

In the final report, the facility's staffing levels for radiation oncologists, physicists, radiation therapists and dosimetrists are compared to the accredited facility averages and averages for the facility's stratum as defined in the following table. The table allows facilities to identify personnel and equipment utilization issues. Staffing recommendations may be part of the final report; however, variations from these levels generally do not result in withholding of accreditation unless inadequate staffing levels result in non-compliance with ACR Practice Guidelines and Technical Standards and/or compromise patient safety.

The strata are defined as:

Academic/CCC Comprehensive Cancer Center or main teaching hospital of a medical school

H1 Hospital based; 600 or more patients

F1 Freestanding; 600 or more patients

H2 Hospital based; 201-599 patients

F2 Freestanding; 201-599 patients

H3 Hospital based; 200 or fewer patients

F3 Freestanding; 200 or fewer patients

	ALL ACCREDITED FACILITIES	ACADEMIC / CCC	H1	H2	H3	F1	F2	F3
New patients/ radiation oncologist	205	156	278	215	140	203	238	160
New patients/ Physicist	265	174	273	257	246	277	321	256
New patients/ FTE dosimetrist	273	265	346	275	196	318	301	211
New patients/ FTE therapist	74	65	90	73	56	70	81	75
FTE therapist/ Rx machine	3.1	4.1	3.6	3.1	2.6	3.4	3.1	2.2
New patients/ Rx machines	215	222	305	222	133	236	245	143

**While it may be instructive to compare staffing data to the facility's stratum and to the national average for accredited facilities, note that this data is incomplete in some important aspects. The data does not account for the staff's other duties (e.g. simulation for therapists) nor is the data scaled for complexity or the proportion of different pathologies treated in any given clinic. Each facility should, when comparing their staffing data to stratum and national averages, consider their patient population, range and complexity of services provided, and any staff duties outside of the core duties assumed in this data table.*

Continuous Quality Improvement (CQI)

November 27, 2013

11:35am

The Medical Director of Radiation Oncology will be responsible for the institution and ongoing supervision of the continuous quality improvement program. Elements of the program include:

- Chart review is required and should include cases in which there is a variation from prescription of greater than 10% of intended total dose, new modalities or techniques, and charts in which an incident report is filed
- Morbidity and mortality review
- Review of internal outcome studies which include radiation oncology patients
- Focus studies (Facility Practice Improvement)
- Individual physician/physicist peer review
- Patient satisfaction surveys
- New patient conferences
- Port film/image review
- Chart rounds

Frequent Deficiencies

The following are recommendations that are *frequently* included in the final report and must be addressed before a facility will be granted accreditation. Please note that other serious deficiencies, *not* seen frequently and therefore not listed, may also require corrective action and documentation prior to granting of accreditation.

- The treatment prescriptions should include: volume (site) to be treated, description of ports (i.e., AP, PA, lateral, etc.), radiation modality, dose per fraction, number of fractions per day, number of fractions per week, total number of fractions, total tumor dose and prescription point or isodose.
- Port verification films/images should be taken at the beginning of therapy, with field changes, and at least every other 5-10 treatments. All images should be labeled with the patient's name, date taken, field size, and direction of the beam as well as the reviewing radiation oncologist's initial/signature and date. IMRT - confirmation of patient positioning should be performed initially and then periodically, at least weekly, throughout the course of the patient's treatment.
- At the completion of treatment, the qualified medical physicist shall review the entire chart to affirm the fulfillment of the initial and/or revised prescription dose. The review should be documented by the physicist, initialed/signed and dated **no later than one week** after the end of treatment.
- Each patient chart should contain a documented, comprehensive history and physical examination performed by the radiation oncologist, including a comprehensive history of the present illness, past medical history, review of systems, review of imaging studies and laboratory data, histopathology diagnosis and recommendations for treatment.

- The department should have a documented, formal treatment planning system quality assurance plan, including the periodic confirmation of the treatment planning system consistency.
- Patients should be evaluated by the radiation oncologist at least weekly. Weekly exams should be thoroughly documented in the patient chart.
- A radiation oncologist should be available for direct care and quality review on a daily basis. The radiation oncologist, facility, and support staff should be available to initiate urgent treatment within a medically appropriate response time on a 24-hour basis or refer to a facility that is available to treat on a 24-hour basis. When unavailable, the radiation oncologist is responsible for arranging appropriate coverage. A radiation oncologist's availability should be consistent with state and federal requirements.
- At the completion of treatment, a follow-up plan should be documented in the patient chart, and patients should be seen by the radiation oncologist at regular, on-going intervals. Follow-up notes should be documented in the patient record.
- Complete documentation should be included in the patient record when brachytherapy is performed. Written directives documented for each procedure should include the treatment site, isotope, number of sources and the planned dose to designated points. After brachytherapy is completed, a written summary of treatment delivery should include: total dose of brachytherapy and external beam therapy, time of source insertion and removal and documentation of a radiation safety survey of the patient and room.
- Documentation of delivered doses to volumes of target and non-target tissues, in the form of dose volume histograms and representative cross-sectional isodose treatment diagrams, should be maintained in the patient's written or electronic record.
- Physician peer review activities should be formalized and documented.
- Formal Quality Assurance & Improvement program should include: chart rounds, new patient rounds, and morbidity and mortality conferences.
- IMRT QA should be documented and approved prior to initiation of treatment.
- The responsibilities of the radiation oncologist shall be clearly defined and should include the following:
Define the goals and requirements of the treatment plan, including the specific dose constraints for the target(s) and nearby critical structure(s).

Final Report

The report is issued to the radiation oncologist who requested the survey. The Committee issues a final report after the on-site survey. The report is generally sent within 8-12 weeks following the on-site survey. The report is based on the findings of the surveyors, as well as information provided in the initial application and verified by the surveyors. The accreditation report includes:

- Comparison of facility/staffing data with the accredited facilities data.

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- Evaluation of facility's compliance with guidelines and standards from ~~November~~ **November 27, 2013** information and review by surveyors. **11:35am**
- Surveyor comments on individual case reviews.
- Specific recommendations for improvement.

Accreditation Status

The term of accreditation is three years. Facilities that are not granted accreditation will either be:

- Deferred with 90 days to submit a Corrective Action Plan. After the Corrective Action Plan is approved by the Committee, the facility may be required to perform a self audit (measures for self audit will be selected by the Committee) and submit the results no later than 6 months after receipt of response to corrective action. Following Committee approval of the self-audit, the facility may be granted a 3 year accreditation. The Committee may request a re-survey if Corrective Action Plan is approved. Additional fees may be applied such as On-Site Surveyors' expenses including travel and lodging.
- Denied with 90 days to submit a Corrective Action Plan. After the Corrective Action Plan is approved by the Committee, the facility will be required to participate in a follow up survey (6-9 months after receipt of response to corrective action). A re-application fee of \$5,000 must be submitted with the survey agreement. The surveyors will complete a report of their findings which will be reviewed by the Committee. Following Committee approval of this report, the facility may be granted a 3 year accreditation.

Marketing Your Accreditation

Once accreditation has been achieved, the facility will receive a marketing package (link to documents is included in your final report) to assist in promoting this success within the community. In addition, all sites fully accredited (and those under review) will be listed by program and state on the ACR Web site at www.acr-org.

The marketing tools include:

- Camera-ready ad
- Press release
- Certificate suitable for framing
- Certification mark provided in decal and electronic format

Application for Renewal

The application process for sites applying for renewal is essentially the same as for new sites, however, a facility's previous recommendations will be carefully reviewed to ensure that recommendations for improvement have been implemented. In order to maintain accreditation, it is recommended that facilities begin the application process nine months prior to the expiration date of their accreditation.

Appeal Mechanism

An appeal process is available to a radiation oncology facility that disagrees with the accreditation report. To appeal, the chief of radiation oncology submits a written request to the Chairman of the Committee on Radiation Oncology Practice Accreditation within thirty days of receipt of the accreditation report.

Survey Fees

Survey fee for the main facility is \$9,500.00; \$3,000.00 for each additional site. **Fees are non-refundable and subject to change without notice.** If a facility is denied accreditation and required to participate in a follow up survey, a fee of \$5000 must be submitted prior to scheduling the site visit. Checks should be made payable to The American College of Radiology.

Effective on August 5, 2013: Any requested change in the survey date by the facility or cancellation of a scheduled survey after ACR has invested funds in the survey (such as travel funds) must be reimbursed by the facility in addition to the survey fee.

Practice Guidelines and Technical Standards

We highly recommend that you become familiar with the ACR Practice Guidelines and Technical Standards. These serve as the foundation for each of our accreditation programs and may be accessed by both ACR members and non-members through our Web site at www.acr.org.

R-O PEER™

R-O PEER offers radiation oncologists the opportunity to fulfill Part IV, Evaluation of Performance in Practice for Maintenance of Certification (MOC), for the American Board of Radiology (ABR) through the Radiation Oncology Practice Accreditation Program. R-O PEER™, the ACR's Practice Quality Improvement (PQI) program is offered as part of the Radiation Oncology Practice Accreditation Program. Following the survey, a final report will be issued to each participating radiation oncologist. If any corrective action measures are identified, the final report will request additional documentation that demonstrates that these have been appropriately addressed. When this documentation is submitted and reviewed, a certificate of satisfactory completion of the PQI project will be issued.

For information on R-O PEER and to access the application, visit the ACR web site at <http://www.acr.org/Quality-Safety/Accreditation/RO>

For Additional Information

Contact the ACR Radiation Oncology Practice Accreditation Program office in Reston, Virginia at 800-770-0145 or rad-onc-accred@acr.org.

APPENDIX A

The following list of references is by no means complete, but it may be used as a starting point to assist you with your application and survey process:

American College of Radiology Practice Guidelines and Technical Standards, Reston, VA

<http://www.acr.org/Quality-Safety/Standards-Guidelines/Practice-Guidelines-by-Modality/Radiation-Oncology>

<http://www.acr.org/Quality-Safety/Standards-Guidelines/Technical-Standards-by-Modality>

American Association of Physicists in Medicine, (AAPM). Comprehensive QA for Radiation Oncology: Report of AAPM Radiation Therapy Committee Task Group 40, 1994.

American Association of Physicists in Medicine, (AAPM). Task Group 142 Report, Quality Assurance of Medical Accelerators, 2009.

American Association of Physicists in Medicine, (AAPM). Protocol for clinical reference dosimetry of high-energy photon and electron beams. Report of AAPM Radiation Therapy Task Group 51, 1999.

American Association of Physicists in Medicine, (AAPM). Quality Assurance for Clinical Radiotherapy Treatment Planning Report of AAPM Radiation Therapy Committee Task Group 53, 1998.

AFFIDAVIT

STATE OF TENNESSEE

COUNTY OF Shelby

NAME OF FACILITY: _____

I, Erich Mounce, after first being duly sworn, state under oath that I am the applicant named in this Certificate of Need application or the lawful agent thereof, that I have reviewed all of the supplemental information submitted herewith, and that it is true, accurate, and complete.

[Signature] / CEO
Signature/Title

Sworn to and subscribed before me, a Notary Public, this the 26th day of November, 2013, witness my hand at office in the County of Shelby, State of Tennessee.

[Signature]
NOTARY PUBLIC

My commission expires June 5, 2017.

HF-0043

Revised 7/02





2013
NOV
10

LETTER OF INTENT TENNESSEE HEALTH SERVICES AND DEVELOPMENT AGENCY

The Publication of Intent is to be published in the Commercial Appeal which is a newspaper of general circulation in Shelby County, Tennessee, on or before November 10, 2013 for one day.

=====

This is to provide official notice to the Health Services and Development Agency and all interested parties, in accordance with T.C.A. § 68-11-1601 *et seq.*, and the Rules of the Health Services and Development Agency, that Methodist Healthcare-Memphis Hospitals (a general hospital), owned and managed by Methodist Healthcare-Memphis Hospitals (a not for profit corporation), intends to file an application for a Certificate of Need to establish a comprehensive cancer center, to relocate linear accelerator, positron emission tomography/computed tomography (PET/CT), magnetic resonance imaging (MRI) and computed tomography (CT) services and equipment, to replace the MRI equipment, to acquire an additional linear accelerator and to establish ambulatory operating rooms. The facility will be located at 7945 Wolf River Boulevard, Germantown, TN 38138 and will be operated as an outpatient department of Methodist Healthcare – Memphis Hospitals under the name WEST CANCER CENTER. The project includes a full array of cancer services and programs. The project involves approximately 8,050 square feet of new space and 101,235 of renovated space. This project does not involve inpatient beds or other services for which a certificate of need is required. The estimated project costs are \$60,554,193.

The anticipated date of filing the application is on or before November 13, 2013. The contact person for this project is Carol Weidenhoffer, Corporate Director of Planning, Research and Business Development, who may be reached at: Methodist Healthcare, 1407 Union Avenue, Suite 300, Memphis, TN, 38104, 901-516-0679.

Carol Weidenhoffer
(Signature)

11/7/2013
(Date)

Carol.Weidenhoffer@mlh.org
(E-mail Address)

=====

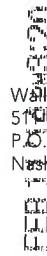
The Letter of Intent must be filed in triplicate and received between the first and the tenth day of the month. If the last day for filing is a Saturday, Sunday or State Holiday, filing must occur on the preceding business day. File this form at the following address:

**Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243**

=====

The published Letter of Intent must contain the following statement pursuant to T.C.A. § 68-11-1607(c)(1). (A) Any health care institution wishing to oppose a Certificate of Need application must file a written notice with the Health Services and Development Agency no later than fifteen (15) days before the regularly scheduled Health Services and Development Agency meeting at which the application is originally scheduled; and (B) Any other person wishing to oppose the application must file written objection with the Health Services and Development Agency at or prior to the consideration of the application by the Agency.

=====



Waller Lansden Dortch & Davis, LLP
514 Union Street, Suite 2700
P.O. Box 198966
Nashville, TN 37219-8966

615.244.6380 main
615.244.6804 fax
wallerlaw.com

Kim Harvey Looney
615.850.8722 direct
kim.looney@wallerlaw.com

February 11, 2014

VIA HAND DELIVERY

Ms. Melanie Hill
Executive Director
Health Services and Development Agency
9th Floor
502 Deaderick Street
Nashville, Tennessee

Re: Methodist Healthcare-Memphis Hospitals d/b/a West Cancer Center,
Germantown (Shelby County) - CN1311-043

Dear Melanie:

This is to provide official notice that our client, Saint Francis Hospital, wishes to oppose the application of Methodist Healthcare-Memphis Hospitals d/b/a West Cancer Center, Germantown, Tennessee CN1311-043 for the establishment of an off-campus outpatient department which includes the following: 1) relocation of a linear accelerator, positron emission tomography/computed tomography (PET/CT), magnetic resonance imaging (MRI) and computed tomography (CT services and equipment; 2) replacement of MRI equipment; and 3) an additional linear accelerator. This application will be heard at the February meeting.

Saint Francis respectfully requests that the HSDA deny this request. If you have any questions, please give me a call at 850-8722.

Sincerely,

Kim Harvey Looney

KHL:lag

cc: David Archer, President Saint Francis Hospital
Carol Weidenhoffer, Methodist Healthcare-Memphis Hospitals dba West Cancer Center

February 11, 2014

VIA HAND DELIVERY

Melanie M. Hill
Executive Director
Tennessee Health Services and
Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, TN 37243

RE: Methodist Healthcare-Memphis Hospitals, CN1310-043

Dear Ms. Hill:

This letter is submitted on behalf of Baptist Memorial Hospital-Memphis and its affiliates including Baptist Memorial Hospital – Tipton (herein collectively referred to as “Baptist Memorial”).

Baptist Memorial is opposed to the application referenced above to the extent it proposes to add a new linear accelerator to the market. Existing providers of linear accelerator services have ample capacity to meet the needs for radiation therapy, both currently and in the foreseeable future. The proposed additional linear accelerator does not meet the Agency’s criteria for approval, and Baptist Memorial urges that it not be approved.

We would appreciate the inclusion of this letter in the packet sent to Agency members. Thank you for your attention to this matter.

Very truly yours,

BUTLER SNOW LLP



Dan H. Elrod

clw

*The Pinnacle at Symphony Place
150 3rd Avenue South, Suite 1600
Nashville, TN 37201*

DAN H. ELROD
615.651.6702
dan.elrod@butlersnow.com

T 615.651.6700
F 615.651.6701
www.butlersnow.com



OFFICE OF THE PRESIDENT
650 East Parkway South
Memphis, TN 38104
(901) 321-3251 • Fax (901) 321-3290
www.cbu.edu

December 18, 2013

Ms. Melanie Hill
Executive Director
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

Re: The West Cancer Center Certificate of Need Application

Dear Ms. Hill,

I am writing on behalf of Christian Brothers University, our 1,895 students, faculty and administration. This letter is submitted in support of the West Cancer Center Certificate of Need application which has been filed with your agency.

There is a strong need for CBU in Memphis and the education we provide the brightest of young minds. The disciplines that we train, and the skills and understanding that we impart, are increasingly critical for success in the dynamic 21st century world. Many of these students we are currently training will hopefully have an opportunity to give back to the community through a career in healthcare or administration at West Cancer Center.

Accordingly, we have been entrusted with hundreds of millions of dollars of physical and intellectual assets to use wisely, and in doing so, change the lives of individuals, families, and communities for decades. I fully expect the West Cancer Center to change the lives of everyone within this region through centralized care and access to specialized medical, surgical, diagnostic and radiation programs in our own community.

I am also extremely impressed and optimistic regarding the economic impact the West Cancer Center will bring to the region. I have reviewed Dr. Cyril Chang's economic impact study and the numbers are extremely impressive. By the year 2017, it is estimated that almost 9,000 jobs will be created through the growth of West Cancer Center. As someone who cares deeply about this city, I am also optimistic about Dr. Chang's estimate that through the year 2017 the West Cancer Center will have generated over \$5 billion to the local economy.

As our University grows, so does the growth of healthcare degrees and programs we are enhancing and creating. We will produce the very best minds in the healthcare field and my hope is they choose to stay in Memphis and possibly work with all the talent that will make up West Cancer Center.

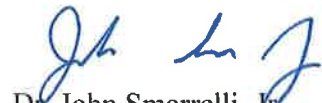
CHRISTIAN BROTHERS UNIVERSITY

The incidence and mortality rates due to cancer are simply too high in this region, even more so in our African American Community. We simply must do all we can do to determine why Memphis has the highest mortality rate of breast cancer in African American women than any other large city in our country. We must do all that we can to provide access to care and I believe the West Cancer Center will have the ability to lower these statistics.

For these reasons, and because I strongly believe the West Cancer Center will bring improved outcomes, I encourage the Agency and its members to approve this application. I am familiar with the work of Dr. William H. West, founder of The West Clinic, and I have complete confidence that what he began in Memphis in 1979 will move Memphis into the national spotlight in finding cures and reducing cancer incidence.

Thank you for your consideration of this application.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Smarrelli, Jr.", written in a cursive style.

Dr. John Smarrelli, Jr.
President

Ms. Melanie Hill
Executive Director
Health Services Dev. Agency
Andrew Jackson Building
502 Deaderick St.
Nashville, Tn. 37243

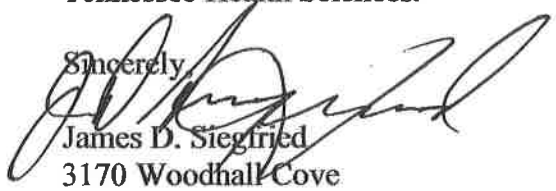
Ms. Hill:

Nov. 15, 2002 I started by cancer journey at West Clinic. I was a non smoker diagnosed with Stage IV lung cancer. Twelve years later I have survived five recurrences of lung cancer and prostate cancer, a second primary. I can truly say I am a survivor. As I look back on this journey I feel like a pawn in a board game. Go to this location; go to that office. I had surgery to remove a lung, numerous chemo infusions and radiation treatments; all at different locations. Believe me cancer treatment is tough enough without enduring the countless trips to various locations that are taxing and depleting of one's physical and emotional energy.

Needless to say I was delighted to hear West Clinic, Methodist Health Care and The State of Tennessee Health Sciences are joining forces to build a facility that will house in one location surgical units, radiation treatment, chemotherapy infusion and PET, MR, and CT imaging rooms. Having all these services and equipment located in facility will be an extreme cost savings and a blessing for patients who will not have to travel from facility to facility.

Any cancer journey is an emotional rollercoaster. Locating all of these resources and services on the same campus will be very patient friendly. I fully support and recommend the State of Tennessee certify this request for a new facility formed by the combined resources if West Clinic, Methodist Health Care and The University of Tennessee Health Sciences.

Sincerely,



James D. Siegfried
3170 Woodhall Cove
Germantown, Tn. 38138
901.486.0405

The University of Tennessee

WEST

Institute for Cancer Research

February 5, 2014

Ms. Melanie Hill
Executive Director
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

Re: The West Cancer Center Certificate of Need Application

Dear Ms. Hill,

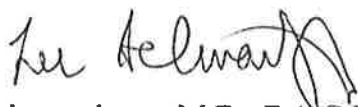
This letter is submitted in support of the West Cancer Center Certificate of Need application which has been filed with your agency. As the Director of the University of Tennessee West Cancer Center and the Medical Director for West Clinic, I submit this letter of support on behalf of all 33 physicians working within the West Clinic.

The West Clinic has a long history of scientific contributions that have advanced the field of cancer care resulting in cures for more patients. From its very creation 35 years ago, the unique focus on clinical research grew into a commitment to provide the latest cancer treatment options in a patient-focused setting. With the collaboration of University of Tennessee Health Science Center, The West Clinic and Methodist Healthcare, I fully expect the West Cancer Center to change the lives of everyone within this region through centralized multidisciplinary care and access to specialized medical, surgical, diagnostic and radiation programs in our own community.

Over the past two year we have begun to assemble a team of talented clinicians, scientists, researchers and surgeons, but in order to truly become a comprehensive cancer center, we need more of the best and brightest researchers from world-renowned cancer centers to ensure that we are able to stay on the cutting edge of research that translates into new drugs and cures. One of the most significant recruitment factors in bring in such talent to the State of Tennessee and the Memphis region is the facilities and equipment each physician feels is important to provide care to patients. The CON for the West Cancer Center capital construction and the linear accelerator allow us to do just that. Integrating all cancer physicians into one facility provides these individuals battling cancer seamless and patient centered care

Thank you for your consideration of this application. Please approve this application so that the all patients within the community around Memphis will have the ability of choice and access for exceptional cancer care.

Sincerely,

A handwritten signature in black ink, appearing to read "Lee Schwartzberg", with a stylized flourish at the end.

Lee Schwartzberg, M.D., F.A.C.P.
Chairman & Medical Director, West Cancer Center
Chief, Division of Hematology/Oncology
Professor of Medicine
University of Tennessee Health Science Center



December 16, 2013

Ms. Melanie Hill
Executive Director
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

Re: The West Cancer Center Certificate of Need Application

Dear Ms. Hill,

I am writing this letter to fully support the Certificate of Need Application for The West Cancer Center. American Cancer Society is celebrating its 100th anniversary this year. Our goal for the 21st century is a simple, yet challenging one: **make this cancer's last century.** With the help of strategic partnerships across the country, such as The West Cancer Center, we are currently saving 400 lives each day from this disease. We know that we can get to 1,000 each day by 2015, and ultimately 10,000. I firmly believe that the creation of the West Cancer Center can be a critical partner in working with us to achieve that goal.

A cancer center of this magnitude comes with many benefits to a community. Those directly related to the mission of the American Cancer Society include the ability to serve more individuals affected by cancer, the ability to continue our focus on prevention and early detection, the ability to address critical issues within disparities in the Mid-South region, and the creation of a centralized cancer treatment "hub" that improves many barriers to care that come with servicing those affected by cancer in such a large metropolitan area as Memphis. Patient navigation is at the center of those barriers. Navigation for patients is one of the most difficult challenges that the patient, caregivers, oncology professionals, and patient support face. This cancer center is a critical step in remedying that important obstacle.

More than one million people will be diagnosed with cancer each year. Access to quality treatment and care is one of the most critical issues that confront those who are diagnosed. A quality cancer center such as The West Cancer Center in Memphis can serve a critical number of patients in an area with some of the highest populations of underserved individuals in our nation.

We are beyond excited to partner our patient support programs, 24-hour access to information, and future organizational plans and goals with a quality cancer center like this one. The team at The West Cancer Center has been a pivotal partner with us in our mutual goal to fight this dreaded disease. As a result of their noble endeavor in bringing this facility to Memphis, we hope to celebrate a world with more birthdays and finish the fight to **make this cancer's last century.**

Sincerely,

A handwritten signature in black ink, appearing to read "Letitia Thompson".

Letitia Thompson, MPPA
Vice President Health Systems
American Cancer Society

stay well | get well | find cures | fight back | cancer.org | 1.800.221.2345

Mid-South Division, Inc.
1380 Livingston Lane
Jackson MS 39213
601.321.5500 f) 601.362.8876

December 16, 2013

Ms. Melanie Hill
Executive Director
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, TN 37143

Dear Ms. Hill,

My name is Mark Wagner, Jr. and I am a patient at The West Clinic. I am writing on behalf of The West Clinic and their goal to centralize patient care to one location. As a cancer patient, I believe it would be a benefit to have a facility that treats the whole cancer patient. Having all disciplines under one roof would significantly benefit the patients and their caregivers/families by allowing for better continuity of care.

Cancer is a devastating and complicated diagnosis. In many cases, treatment requires being in the care of multiple providers. While I was under active treatment, I had several appointments at different locations in the same day. Driving to separate locations for these appointments created additional stress.

The objective of this new cancer clinic is to consolidate/combine services including: chemotherapy, imaging, radiation, etc. to one centralized location. This would resolve many challenges common to most cancer patients. A centralized location will minimize the stress of coordinating logistics to receive treatment.

The West Clinic provides excellent care. I believe this new West Cancer Center location will allow for greater ease and access to care therefore improving the patient/caregiver experience.

I appreciate being given this opportunity to be one of the voices for The West Clinic and hope they succeed in making their vision a reality.

Respectfully,

A handwritten signature in black ink, appearing to read 'Mark P. W. Jr.', written in a cursive style.

Mark Wagner, Jr.

The University of Tennessee

WEST

Cancer Center

Methodist Healthcare Family

February 7, 2014

Ms. Melanie Hill
Executive Director
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

Re: The West Cancer Center Certificate of Need Application

Dear Ms. Hill,

This letter is submitted in support of the West Cancer Center Certificate of Need application which has been filed with your agency.

Earlier this year, I was recruited to join the UT West Cancer Center initiative which is collaboration between The University of Tennessee Health Science Center, Methodist Healthcare and the West Clinic. As the new Director of the Radiation Oncology Department for the University of Tennessee West Cancer Center and the Chairman of the Department of Radiation Oncology for the University of Tennessee Health Science Center, I submit this letter of support on behalf of the 7 radiation oncologists that will be working within the UT West Cancer Center.

We fully expect this new center to change the lives of everyone within this region through centralized care and access to specialized medical, surgical, diagnostic and radiation programs and we are honored to be part of it. In an effort to raise the quality of radiation therapy delivered to patients throughout the region, however, we need an additional linear accelerator. We have exceptionally well trained staff, but we are currently operating our machines beyond full capacity because of the volume of cancer patients within this region. This has severely impaired our ability to deliver care that is timely and maximally effective.

In addition to our desire to improve the quality of care delivered within this region we are committed to developing a program that serves the research and educational mission of the University of Tennessee. Without a new linear accelerator we believe our ability to train the academic leaders of tomorrow is compromised. Having been recruited specifically to serve this mission it is critically important that we be allowed to partner with our colleagues within the UT West Cancer Center and provide the very best care possible.

Thank you very much for your consideration. Do not hesitate to call me if you have any questions.

Sincerely,



Matthew T. Ballo, MD
Chairman & Professor,
Department of Radiation Oncology
UT/West Cancer Center
Methodist University Hospital
1265 Union Ave
Memphis, TN 38104
Phone: 901-516-7367



A C WHARTON, JR.
MAYOR

November 7, 2013

Ms. Melanie Hill
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

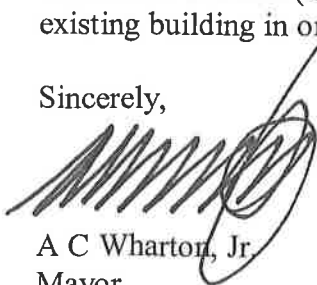
Dear Ms. Hill:

As the Mayor of the City of Memphis, I support the CON request of the West Cancer Center in partnership with the University of Tennessee Health Science Center, The West Clinic and Methodist Healthcare.

Memphis, Shelby County has cancer incidence and mortality rates higher than national averages particularly in breast, colon/rectal and prostate cancers. Even more significant, African Americans die disproportionately (at rates 1.5 times higher) from cancer in Shelby County when compared to Caucasians. Our city has a population of approximately 1 million people which is projected to grow and age as the baby boomers reach retirement. In direct proportion, sadly the anticipated number of cancer patients in the community is expected to grow with the aging population.

Methodist Le Bonheur Healthcare, The West Clinic and the University of Tennessee Health Science Center (UTHSC) entered into a partnership in January 2012 to transform cancer care in the Mid-South. The resources of each partner will significantly help cancer patients in our community beginning with this improved capital collaboration among specialties to provide seamless care and allow cancer patients to receive services at one site of care thereby eliminating transportation challenges. Thus, please accept this letter as my wholehearted support of the Certificate of Need (CON) request to consolidate existing services from multiple sites into one existing building in order to increase efficiencies and integration.

Sincerely,



A C Wharton, Jr
Mayor

February 7, 2014

Melanie Hill
Executive Director
State of Tennessee
Health Services and Development Agency
502 Deaderick Street – 9th Floor
Nashville, TN 37243

Dear Ms. Hill:

I am writing this letter to pledge strong support for Methodist Le Bonheur Healthcare's West Cancer Center. My support comes from both a personal and professional level. On a personal level, I am a cancer survivor. I understand, first hand, the physical and emotional needs patients and families have when confronting this disease. I believe the quality of care and compassion exhibited by the West Cancer Center practitioners is exceptional and is an asset for this community.

On a professional level, I am the senior pastor for the Oak Grove Baptist Church in the heart of South Memphis. As a faith leader in the African American community, I see the growing economic and environmental pressures on my parishioners and know illnesses such as cancer create tremendous hardships for families. In Shelby County, the cancer incidence and mortality rates are higher than national averages particularly in breast, colon/rectal and prostate cancers. Incidence rates are projected to increase with the aging population. Of even more concern, rates show that African Americans die disproportionately (at rates 1.5 times higher) from cancer in Shelby County when compared to Caucasians.

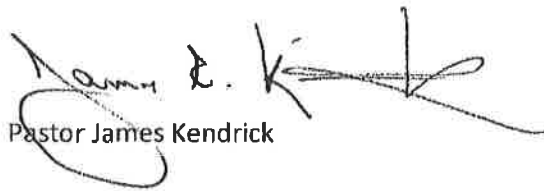
My congregation is committed to be a part of the solution. We entered a covenant relationship with Methodist and became one of the original members of the Congregational Health Network (CHN). CHN is a network of nearly 500 hundred congregations and faith communities - 100 are in the Whitehaven community in South Memphis - partnering with Methodist to share the ministry of caring for patients. The goal of this program is to build stronger relationships with local faith communities in order to improve the patient journey through the healthcare system and more broadly to build healthier communities. As a part of the CHN, we will stand behind this effort in order to help improve cancer care in the Mid-South.

Through the CHN partnership and shared ministry, we are tackling disparities in cancer care and mortality rates between races in Memphis, Tennessee with education, preventive medicine/screenings and elimination of barriers for access to care. A main goal of the West Cancer Care project is to eliminate the fractionization of cancer care by consolidating sites of service for imaging, chemotherapy, surgery and other therapies and counseling services. This will allow patients to receive services at one site of care instead of traveling back and forth to other locations. This will in turn help to reduce disparities in care that are caused by

transportation challenges of multiple appointments in multiple locations. It empowers patients and families to better navigate the complex cancer care system and collaborate in a single visit with a multi-specialty team.

As a life-long Memphian, I am well aware of the disparities that plague our community. I am a witness to Methodist's commitment to reverse these trends. Methodist provides unparalleled access to our community, and this planned development will further the mission to support the health of all people. Approval of the proposed West Cancer Center will advance our shared vision for improved population health.

Sincerely,

A handwritten signature in black ink, appearing to read "James E. Kendrick", with a large, stylized flourish extending to the right.

Pastor James Kendrick

ROTARY INTERNATIONAL

District 6800

Tommy White, District Governor



December 16, 2013

Ms. Melanie Hill, Executive Director
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

Re: The West Cancer Center Certificate of Need Application

Dear Ms. Hill:

This letter is being sent to you on behalf of the two thousand members that make up Rotary District 6800. This district consists of community leaders from the northern half of Mississippi and all of Shelby County, Tennessee. Many of our members have been treated at West Cancer Center and all received the very best treatment available. This letter is submitted on behalf of Rotary District 6800 and its members in support of the West Cancer Center Certificate of Need application which has been filed with your agency.

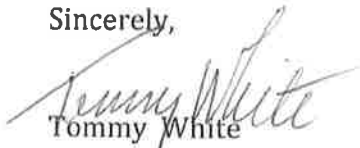
Rotary has a proud tradition of "Service Above Self" and I believe that West Cancer Center's dedicated team of physicians and clinical staff always place the needs of patients first. With the approval of the Certificate of Need, they will be in an even better position to serve patients and their families through consolidated services and access to better care by providing the needed services under one roof. I have personally known many patients who have received their treatment at the West Cancer Center, many traveling two or more hours to Memphis. Having consolidated services will certainly improve the quality of care not only for those who live in and around Memphis, but it will provide a more stream-lined approach for those out-of-town patients coming to Memphis for their care.

It is my understanding from speaking with leadership at West Cancer Center that Memphis continues to unfortunately have higher incidence and mortality rates for those with breast, colon, prostate and lung cancer. Not only are these numbers far too high, but the statistics I have seen indicate that the African American population in Memphis and the MSA have far higher mortality rates than in other major cities across the country. We need all the resources that the West Cancer Center will provide to lower these numbers.

Ms. Melanie Hill
Page Two

For all of this and more, on behalf of District 6800 Rotarians, their families, friends and co-workers, I highly urge the Agency and its membership to approve the Certificate of Need Application for the West Cancer Center.

Sincerely,



Tommy White
District Governor
Rotary District 6800

TW:lee

The University of Tennessee

WEST

Institute for Cancer Research

February 5, 2014

Ms. Melanie Hill
Executive Director
Health Services and Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

Re: The West Cancer Center Certificate of Need Application

Dear Ms. Hill,

This letter is submitted in support of the West Cancer Center Certificate of Need application which has been filed with your agency. I am chairing the philanthropic campaign to bring the much-needed research dollars to Memphis in order to keep our city in the forefront of leading developments in oncology.

We have assembled a group of 48 community leaders from all sectors to work with me in raising private funds to support our research efforts. We must have this support to counter the shrinking dollars from federal funding. Federal support for cancer research was essentially flat from 2005 to 2012 and fell nearly \$300 million last year because of the across-the-board budget cuts. The financial support of the private sector is just as important as the caring and loving teams of healthcare professionals who deliver treatment, perform operations, instigate leading-edge research and conduct clinical trials

The West Clinic has a long history of scientific contributions that have advanced the field of cancer care and cures for more patients. From the very beginning, the unique focus on clinical research grew into a commitment to provide the latest cancer treatment options in a patient-focused setting.

With the collaboration of University of Tennessee Health Science Center, The West Clinic and Methodist Healthcare, I fully expect the West Cancer Center to change the lives of everyone within this region through centralized care and access to specialized medical, surgical, diagnostic and radiation programs in our own community.

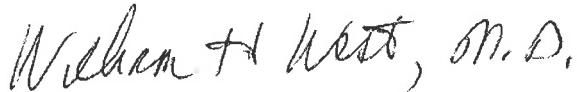
We have already assembled a team of talented clinicians, scientists, researchers and surgeons, but in order to truly become a comprehensive cancer center, we need more of the best and brightest researchers from world-renowned cancer centers to ensure that we are able to stay on the cutting edge of research that translates into new drugs and cures. I am confident that we can raise the funds needed to stay competitive.

As a physician and businessman, I am also extremely impressed and optimistic regarding the economic impact the West Cancer Center will bring to the region. I have reviewed the economic impact study and the numbers are extremely impressive. By the year 2017, it is estimated that almost 9,000 jobs will be created through the growth of West Cancer Center. As a native Memphian, and someone who cares deeply about this city, I am optimistic that through the generosity of our community, we can achieve our goals.

The incidence and mortality rates due to cancer are simply too high in this region, even more so in our African American Community. We simply must do all we can do to determine why Memphis has the highest mortality rate of breast cancer in African American women than any other large city in our country. We must do all that we can to provide access to care and I believe the West Cancer Center will have the ability to lower these statistics.

Thank you for your consideration of this application. The West Cancer Center leadership has my full support to make this a reality.

Sincerely,

A handwritten signature in black ink that reads "William H. West, M.D." The signature is written in a cursive, flowing style.

William H. West, M.D.

Chairman

UT/West Institute for Cancer Research

**CERTIFICATE OF NEED
REVIEWED BY THE DEPARTMENT OF HEALTH
DIVISION OF POLICY, PLANNING AND ASSESSMENT
615-741-1954**

DATE: January 31, 2014

APPLICANT: Methodist Healthcare, Memphis Hospitals
West Cancer Center
7945 Wolf River Boulevard
Memphis, Tennessee 38138

CN1311-043

CONTACT PERSON: Carol Weidenhoffer, Corporate Director of Planning,
Research, and Business Development
1407 Union Avenue, Suite 300
Memphis, Tennessee 38104

COST: \$60,554,193

In accordance with Section 68-11-1608(a) of the Tennessee Health Services and Planning Act of 2002, the Tennessee Department of Health, Division of Policy, Planning, and Assessment, reviewed this certificate of need application for financial impact, TennCare participation, compliance with *Tennessee's State Health Plan*, and verified certain data. Additional clarification or comment relative to the application is provided, as applicable, under the heading "Note to Agency Members."

SUMMARY:

The applicant, Methodist Healthcare–Memphis, West Cancer Center, located in Memphis, (Shelby County), Tennessee, seeks Certificate of Need (CON) approval to establish a comprehensive cancer center, to relocate a linear accelerator, positron emission tomography/computed tomography (PET/CT), magnetic resonance imaging (MRI), and computed tomography (CT) services and equipment, to replace the MRI equipment, to acquire an additional linear accelerator, and to establish ambulatory operating rooms. The facility will be located at 7945 Wolf River Boulevard, Germantown, Tennessee and will be operated as an outpatient department of Methodist Healthcare–Memphis Hospitals under the name West Cancer Center. This project does not involve inpatient beds or other services for which a CON is required.

Methodist will renovate 101,235 square feet of existing space and construct 10,250 of new space. The project cost is reasonable and comparable to similar projects approved in recent years. The project has an estimated cost per square foot of approximately of \$145 square foot (\$16,142,175/111,484 sf) or \$159 (\$17,767,393/sf) with construction contingency.

The applicant, Methodist Healthcare-Memphis Hospitals (Methodist) is a not-for-profit corporation that operates five Shelby County hospitals under a single license. The applicant is a wholly-owned subsidiary of a parent organization, Methodist Healthcare, which is a not-for-profit corporation with ownership and operating interests in healthcare facilities in West Tennessee and North Mississippi.

The total estimated project cost is \$60,554,193 and will be funded through cash reserves as specified in a letter from the Chief Financial Officer in Attachment C.: Economic Feasibility 2.

GENERAL CRITERIA FOR CERTIFICATE OF NEED

The applicant responded to all of the general criteria for Certificate of Need as set forth in the document *Tennessee's State Health Plan*.

NEED: The applicant's Tennessee service area includes Shelby, Fayette and Tipton Counties, as well as DeSoto and Marshall Counties in Mississippi and Crittenden County in Arkansas.

The proposed project is for an integrated comprehensive cancer center that will consolidate multiple freestanding ambulatory sites, all currently located within 4 miles of the project site. The sites to be consolidated include The Methodist Breast Center, The Methodist Radiation Oncology Center, The West Clinic on Humphreys Boulevard, and the West Clinic's Comprehensive Breast Center. The West Cancer Center will house both hospital-based services operated by Methodist, as well as physician, clinical research, and administrative offices owned by The West Center and University of Tennessee Health Sciences Center (UTHSC). The hospital-based LINAC services, equipment and services at Methodist Radiation Oncology Center will be relocated to the new West Cancer and the CON for that site will be surrendered. In addition, the hospital-based PET and MRI services and equipment at the West Clinic will be relocated (MRI will be replaced) to the new West Cancer Center, and the CON for that site will be surrendered.

Methodist, The West Center, and UTHSC entered into an agreement in 2011 to transform cancer care in the Mid-South. The West Clinic currently has over 30 physicians in multidisciplinary specialties and multiple locations in Tennessee, Mississippi, and Arkansas providing services that include medical oncology/hematology, gynecologic oncology, blood cell transplants, diagnostic and interventional radiology, metabolic bone disease/endocrinology, clinical psychology, pain and palliative care, radiation oncology, comprehensive breast center, nutritional counseling, ACORN research, and the WINGS Cancer Foundation. As part of their affiliation, UTHSC moved its Oncology Fellowship Program to the West Clinic and has provided funding to enhance cancer research, care programs, and innovation. The three organizations are advancing efforts to provide leading-edge treatment, extensive clinical trials, and cutting edge research to fight cancer.

The expanded and renovated three story facility will be organized as follows:

- The first floor will house administrative offices for associates from the West Clinic. The remainder of the floor will house the breast center, radiology, radiation therapy, and phlebotomy hospital-based services. The linear accelerator vaults, MRI, and CT rooms/equipment will be located mostly in the new expansion to the side of the building's first floor.
- The second floor will contain surgery clinics, sterile processing, and physician clinics. The only hospital-based space on the second floor is the surgery center and the in-house central sterile processing unit. Two operating rooms will be located here and will function as a department of the hospital.
- The third floor will house the remainder of the administrative and clinical research space operated by the West Clinic and the UTHSC, as well as pharmacy space operated by the clinics. The hospital space located on the third floor includes lab, additional phlebotomy space and the infusion/chemotherapy infusion beds and chairs.

The building will be occupied during the renovation and new construction. Methodist plans to minimize construction exposure to patients and existing services. The majority of the renovations will be on the east side of the first floor and on the second and third floors. The breast center will continue operations during renovations. Partitions will be installed allowing for the renovation area to be sealed off from noise and debris.

To maintain the continuity of care, the relocation of equipment will be staged in a compact time frame and coordinated with the scheduling staff. The LINAC services at Methodist University Hospital, the CT services at the Germantown Diagnostic Center, and MRI services at the West

Clinic and Methodist Germantown Hospital will be open and prepared to accommodate any patients that need to be re-directed during the brief and scheduled down time.

The applicant identified several issues as indicators of need in their designated service area. According to the applicant, the rapid population growth, particularly in the age 65 and older grouping who need health care and cancer care the most, is projected to increase 45% or 67,500 over the next 10 years. (*Applicant Table 3, page 18*).

According to the *Tennessee Projections 2000-2020*, the age 65 and older population increases 15.2% or 18,831 from 2014 to 2018.

Tennessee Service Area Age 65 and Older Population Projections 2014 and 2018

County	2014 Population	2018 Population	% Increase or (Decrease)
Shelby	108,570	124,946	15.1%
Fayette	6,995	8,125	16.8%
Tipton	8,042	9,367	16.5%
Total	123,607	142,438	15.2%

Source: *Tennessee Population Projections 2000-2020, June 2013 Revision*, Tennessee Department of Health, Division of Policy, Planning, and Assessment

Tennessee Service Area Total Population Projections 2014 and 2018

County	2014 Population	2018 Population	% Increase or (Decrease)
Shelby	943,812	954,012	1.1%
Fayette	40,930	44,888	9.7%
Tipton	63,865	67,545	5.8%
Total	1,048,607	1,066,445	1.7%

Source: *Tennessee Population Projections 2000-2020, June 2013 Revision*, Tennessee Department of Health, Division of Policy, Planning, and Assessment

Cancer incidence rates for people over 65 increases at a rate 9 times higher than and the mortality rate increases 18 times higher than the younger population. (*National Age Adjusted Cancer Rates, 2006-2010. Source: National Cancer Institute, Surveillance, Epidemiology and End Results Program (SEER)*)

The aging of the Mid-South population has an impact on incidence and mortality rates with advancing of age. According to the *National Age Adjusted Cancer Rates, 2006-2010, National Cancer Institute, Surveillance, Epidemiology and End Results Program (SEER)*, Shelby, Tipton and Fayette counties have higher incidence rates than the national averages for all cancers.

The Tennessee Department of Health, Office of Cancer Surveillance published the following data in 2013:

	Incidence			Mortality			M:I Ratio [†]
	Count*	Rate**	Confidence Interval	Count*	Rate**	Confidence Interval	
Southwest Region	29,405	469.2	463.8 - 474.7	12,777	209.7	206.0 - 213.4	0.45
Chester	358	401.1	360.2 - 445.5	164	180.5	153.8 - 210.7	0.45
Decatur	358	433.4	388.4 - 482.7	168	206.3	175.6 - 241.5	0.48
Fayette	1,036	495.9	465.6 - 527.8	393	194.9	175.7 - 215.6	0.39
Hardeman	734	480.9	446.4 - 517.3	316	206.6	184.3 - 231.0	0.43
Hardin	780	454.3	422.3 - 488.2	361	207.1	186.0 - 230.1	0.46
Haywood	479	451.8	411.8 - 494.7	228	213.9	186.8 - 243.9	0.47
Henderson	723	467.0	433.3 - 502.8	325	206.8	184.8 - 230.9	0.44

Lauderdale	628	460.0	424.3 - 497.9	317	232.2	207.1 - 259.6	0.50
McNairy	729	444.7	412.3 - 479.2	354	208.8	187.4 - 232.3	0.47
Madison	2,212	442.2	423.8 - 461.2	934	187.2	175.3 - 199.8	0.42
Shelby	19,953	473.7	467.0 - 480.4	8,603	212.6	208.1 - 217.2	0.45
Tipton	1,415	508.5	481.9 - 536.2	614	234.2	215.6 - 253.9	0.46

Just as aging, significant racial disparities in cancer rates exist for Shelby County. Research shows the black population tends to have higher occurrences of cancer as compared to whites. Blacks die disproportionately from all cancers when compared to other races. *National Age Adjusted Cancer Rates, 2006-2010, National Cancer Institute, Surveillance, Epidemiology and End Results Program (SEER).*

Cancer Incidence and Mortality, All Sites Combined, Tennessee, 2005-2009

Incidence		Mortality		M:I Ratio†	
Count**	Rate***	Confidence Interval	Count**	Rate***	
Gender					
Both*	All Races†	158,393	476.8	474.4	-
Black	19,594	480.9	474.0	-	-
White	136,748	475.7	473.1	-	-
Female	All Races†	74,925	414.7	411.7	-
Black	9,624	400.1	392.0	-	-
White	64,269	416.7	413.4	-	-
Male	All Races†	83,468	567.0	563.1	-
Black	9,970	611.8	599.0	-	-
White	72,479	560.9	556.7	-	-
Age at Diagnosis or Death					
0-19	1,399	16.9	16.1	-	-
20-44	12,232	120.1	118.0	-	-
45-64	61,741	738.1	732.3	-	-
65+	83,021	2090.6	2076.4	-	-
Year of Diagnosis or Death					
2005	29,974	474.4	469.0	-	-
2006	30,650	472.4	467.1	-	-
2007	31,777	477.8	472.5	-	-
2008	32,588	478.4	473.1	-	-
2009	33,404	481.1	475.9	-	-

*Excluded hermaphrodites and transsexuals

**Total counts from 2005-2009

***Age-adjusted annual rate per 100,000

†Included whites, blacks, other races and those missing race information, which was less than 0.5% of all cases diagnosed during the period from 2005-2009

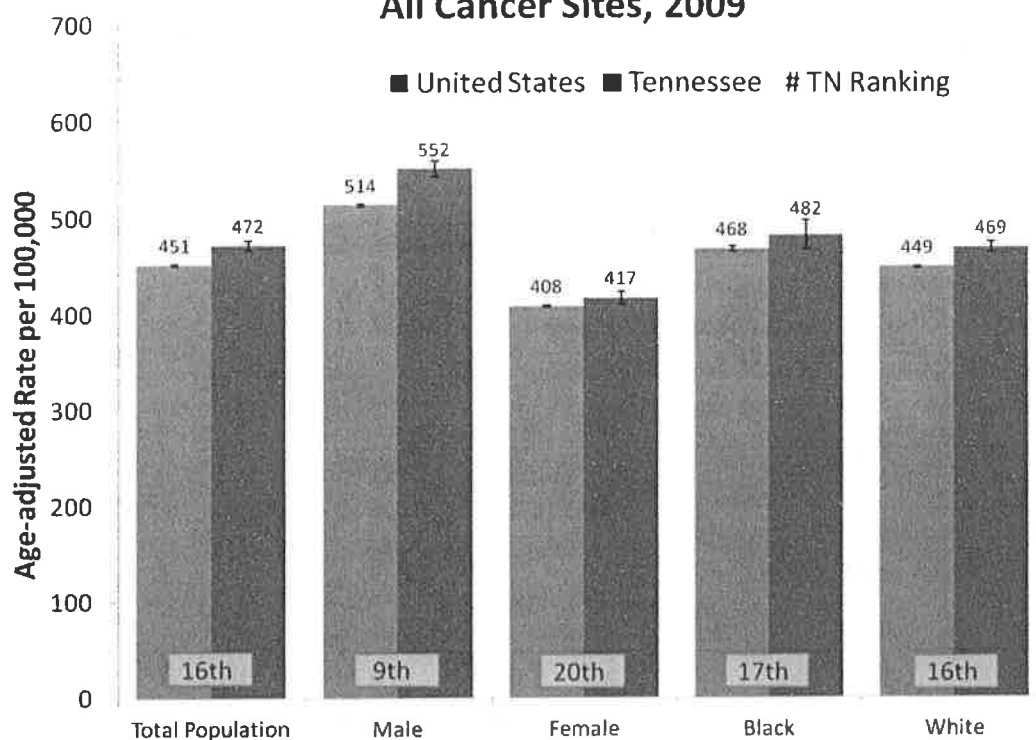
‡Mortality incidence ratio. See Technical Notes for details

Further analysis shows that incidence and mortality rates for breast and lung cancer were highest for Shelby County. The applicant refers to a recent study conducted by Sinai Urban Health Institute, the Metropolitan Chicago Breast Cancer Task Force, and Avon Foundation Cancer Crusade, that identified Memphis as the city with the largest disparity in breast cancer mortality rates between blacks and whites.

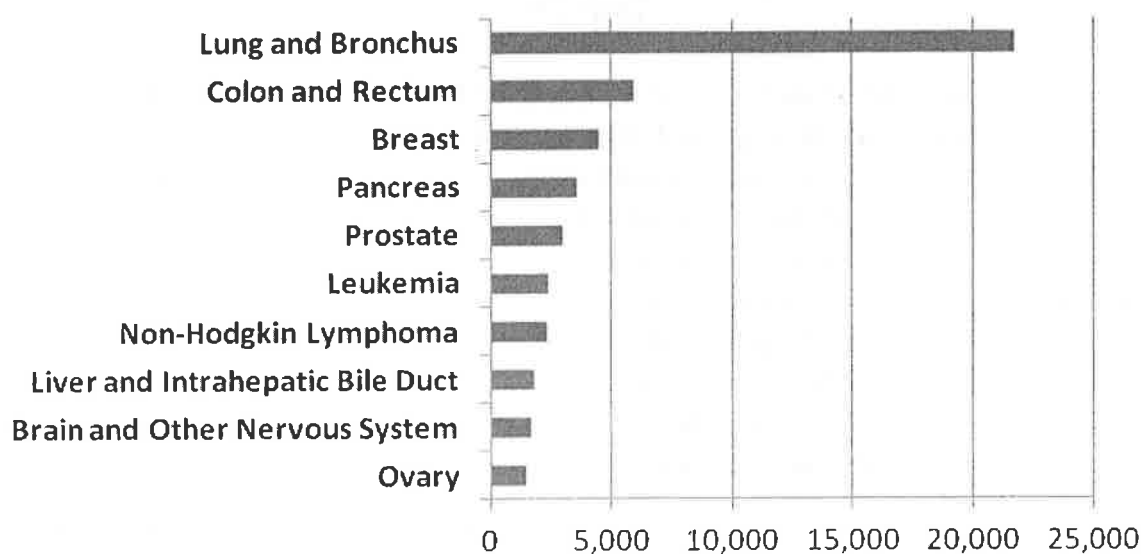
Although significant efforts have been made by local health care systems to build partnerships and pursue the development of collaborative systems of care, the system as a whole has remained fragmented. Methodist believes they must prepare an efficient and cohesive cancer care system in order to face the coming challenges.

The applicant believes the only dominant strategy is the development of an integrated, multidisciplinary cancer program. The specific mission of the applicant is to develop a program that will reduce the disparity between the national cancer mortality rates and those of Shelby County.

Incidence Rates for United States and Tennessee All Cancer Sites, 2009



Total Population

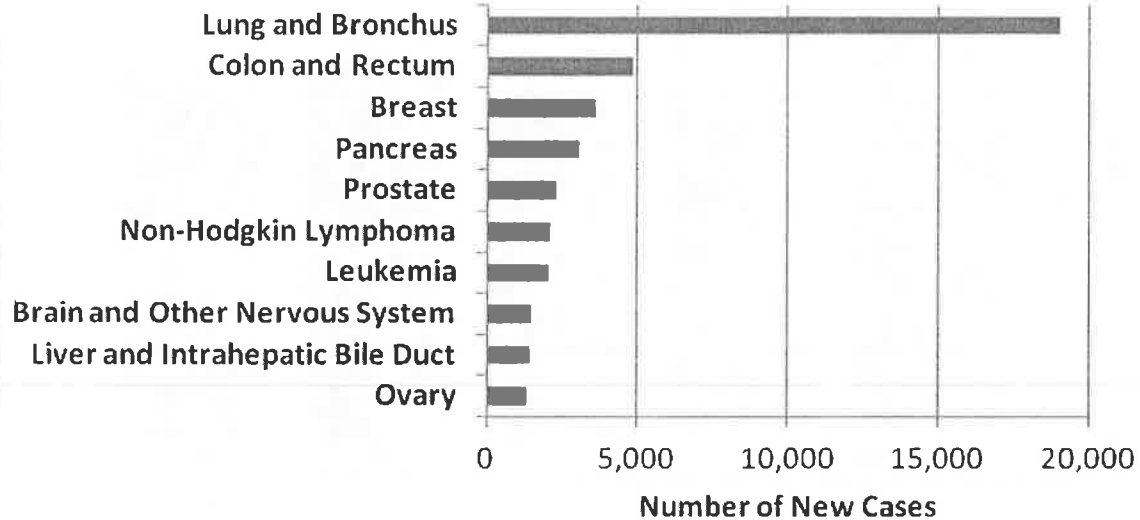


Lung cancer was the 1st leading cause of cancer mortality in the Tennessee population. It was also the 1st leading cause of cancer mortality for whites, blacks, males and females

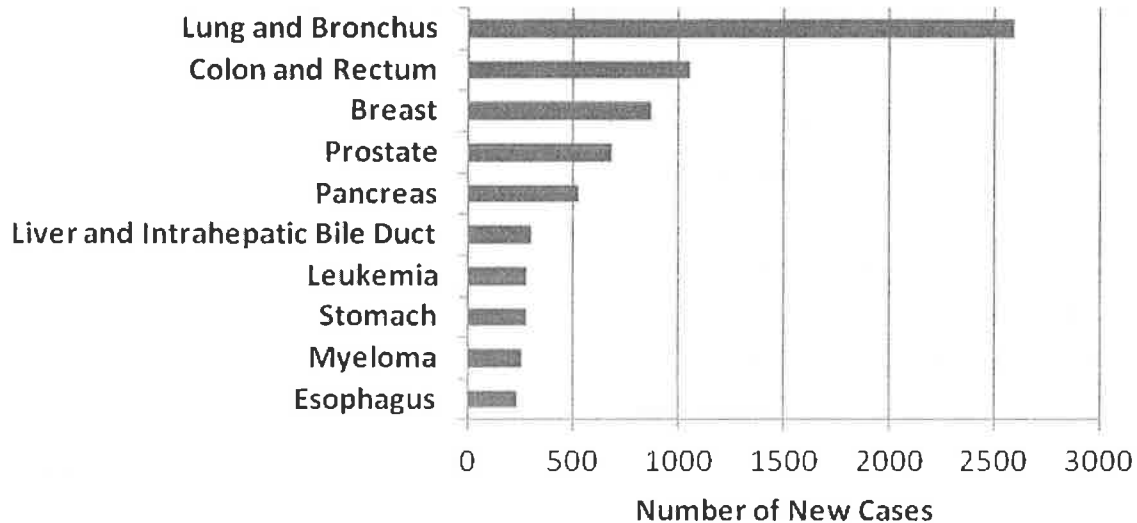
Colorectal cancer was the 2nd leading cause of cancer death for the Tennessee population and for whites, blacks and males, but not for females, among which breast cancer was the 2nd leading cause

Breast cancer, pancreatic cancer and prostate cancer were the 3rd to 5th leading causes of cancer death, respectively, in the Tennessee population

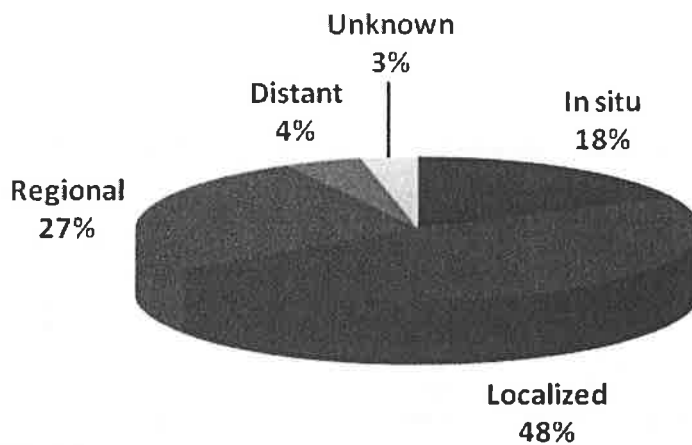
White



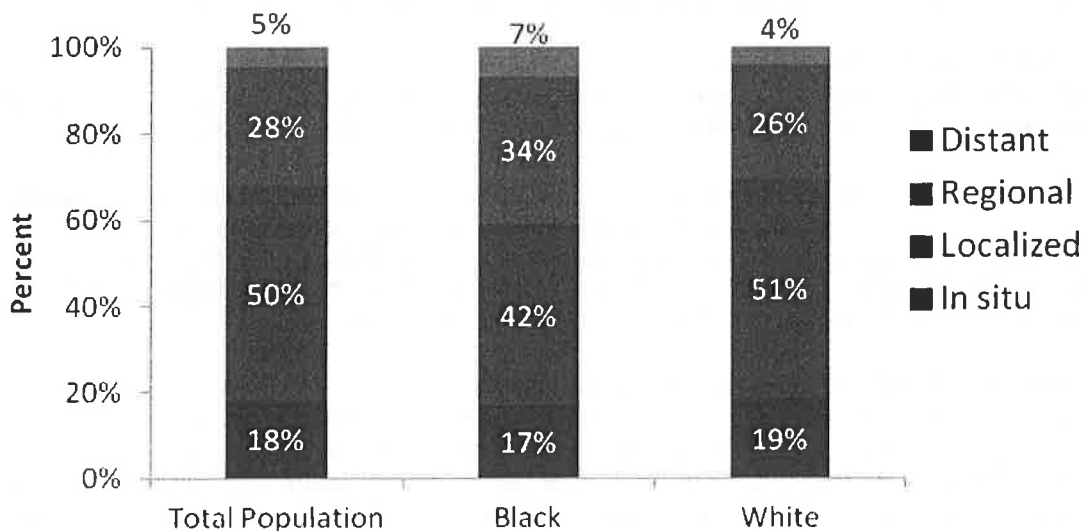
Black



Cancer Stage, Female Breast Cancer Tennessee, 2005-2009



Cancer Stage, Female Breast By Race, Tennessee, 2005-2009



Cases with unknown stage were excluded. Numbers may not sum to 100% due to rounding errors

- Almost one in five (18%) female breast cancer cases were diagnosed at the situ stage
- Almost half of the cases (48%) were diagnosed at localized stage
- About one in four cases (27%) were diagnosed at regional stage
- 4% of cases were diagnosed at distant stage
- 3% of cases had unknown stage

- Among those with known stage, one-third (33%) were diagnosed at late stages, either at regional or distant stage
- Black women had a higher proportion (41%) of cases diagnosed at late stages than white women (30%). This may partially explain the higher breast cancer mortality among black women

The following chart contains the 2012 linear accelerator utilization for 2012.

Service Area Linear Accelerator Hospital Utilization 2012

Facility	2012 Units	2012 Treatments
Baptist Memorial Hospital-Memphis	2	11,052
Baptist Memorial Hospital-Tipton	1	7,610
Methodist Healthcare-University Hospital	3	23,756
Saint Francis Hospital	2	6,795
*St. Jude's Children's Research Hospital	2	1,437
**Baptist Memorial Hospital-DeSoto MS.	1	10,152
Total	11	60,802

Source: HSDA Equipment Registry and Applicant Information

The applicant excluded St Jude's volume from the total number of procedures due to the uniqueness of their patient population and Baptist DeSoto due to its location in Mississippi.

The total number of procedures per unit was 6,596 excluding St. Jude and Baptist DeSoto.

TENNCARE/MEDICARE ACCESS:

Methodist currently serves Medicare, TennCare, and medically-indigent patient populations. Methodist has TennCare contracts with BlueCross Blue Shield and United Healthcare.

The applicant's 2016 projected payor mix is Medicare-\$1,967,651,569 or 34%, TennCare-\$1,345,522,814 or 23%, Self-Pay-\$323,427,151 or 6%, and commercial/other-\$2,103,635,553 or 37% of total gross revenues. The payor mix for the West Center only is projected to be Medicare-\$1,203,963,694 or 44%, TennCare-\$1,345,522,814 or 23%, Self-Pay-\$20,769,157 or 5%, and commercial/other-\$183,327,105 or 40% of total gross revenues.

ECONOMIC FACTORS/FINANCIAL FEASIBILITY:

The Department of Health, Division of Policy, Planning, and Assessment has reviewed the Project Costs Chart, the Historical Data Chart, and the Projected Data Chart to determine if they are mathematically accurate and the projections are based on the applicant's anticipated level of utilization. The location of these charts may be found in the following specific locations in the Certificate of Need Application or the Supplemental material:

Project Costs Chart: The Project Costs Chart is located on page 42A of Supplemental 1. The total project cost is estimated to be \$60,554,193.

Historical Data Chart: The Historical Data Chart is located on page 45 of the application. The applicant reports net operating income of \$96,837,000, \$84,637,000 and \$88,224,000 in years 2010, 2011, and 2012, respectively.

Projected Data Chart: The Projected Data Chart for The West Center Project only is located in Supplemental 1, Attachment 11. The applicant projects 132,888 and 136,471

This project consolidates ambulatory cancer centers that are now scattered throughout the Shelby County area. The construction, renovation and expansion of the existing facility is the only acceptable and cost effective way to achieve the goal of a comprehensive cancer center.

Detailed need for the project is included in the Need section of this report.

3. For renovation or expansions of an existing licensed health care institution:
 - a. The applicant should demonstrate that there is an acceptable existing demand for the proposed project.

Methodist Healthcare's mission is to partner with its medical staff and collaborate with patients and families to be the leader in high quality and cost effective healthcare in their service area.

- b. The applicant should demonstrate that the existing physical plant's condition warrants major renovation or expansion.

The proposed project is for the establishment of an integrated comprehensive cancer center that will consolidate multiple freestanding ambulatory sites, all within 4 miles of the project site. The sites to be consolidated include The Methodist Breast Center, The Methodist Radiation Oncology Center, The West Clinic on Humphreys Boulevard, and the West Clinic's Comprehensive Breast Center. The West Cancer Center will house both hospital-based services operated by Methodist, as well as physician, clinical research, and administrative offices owned by The West Center and University of Tennessee Health Sciences Center (UTHSC). The hospital-based LINAC services and equipment and services at Methodist Radiation Oncology Center will be relocated to the new West Cancer and the CON for that site will be surrendered. In addition, the hospital-based PET and MRI services and equipment at the West Clinic will be relocated (MRI will be replaced) to the new West Cancer Center, and the CON for that site will be surrendered.

MEGAVOLTAGE RADIATION THERAPY SERVICE

1. Utilization Standards for MRT Units.
 - a. Linear Accelerators not dedicated to performing SRT and/or SBRT procedures:
 - i. **Full capacity of a Linear Accelerator** MRT Unit is 8,736 procedures, developed from the following formula: 3.5 treatments per hour, times 48 hours (6 days of operation, 8 hours per day, or 5 days of operation, 9.6 hours per day), times 52 weeks.
 - ii. **Linear Accelerator Minimum Capacity:** 6,000 procedures per Linear Accelerator MRT Unit annually, except as otherwise noted herein.
 - iii. **Linear Accelerator Optimal Capacity:** 7,688 procedures per Linear Accelerator MRT Unit annually, based on a 12% average downtime per MRT unit during normal business hours annually.
 - iv. An applicant proposing a new Linear Accelerator should project a minimum of at least 6,000 MRT procedures in the first year of service in its

Service Area, building to a minimum of 7,688 procedures per year by the third year of service and for every year thereafter.

Methodist-West Cancer Center projects 7,111 and 7,715 procedures in years one and two of the project. By year three, the applicant projects 8,336 procedures per unit.

- b. For Linear Accelerators dedicated to performing only SRT procedures, full capacity is 500 annual procedures.

This criterion is not applicable.

- c. For Linear Accelerators dedicated to performing only SRT/SBRT procedures, full capacity is 850 annual procedures.

This criterion is not applicable.

- d. An exception to the standard number of procedures may occur as new or improved technology and equipment or new diagnostic applications for Linear Accelerators develop. An applicant must demonstrate that the proposed Linear Accelerator offers a unique and necessary technology for the provision of health care services in the proposed Service Area.

This criterion is not applicable.

- e. Proton Beam MRT Units. As of the date of the approval and adoption of these Standards and Criteria, insufficient data are available to enable detailed utilization standards to be developed for Proton Beam MRT Units.

This criterion is not applicable.

2. Need Standards for MRT Units.

- a. For Linear Accelerators not dedicated solely to performing SRT and/or SBRT procedures, need for a new Linear Accelerator in a proposed Service Area shall be demonstrated if the average annual number of Linear Accelerator procedures performed by existing Linear Accelerators in the proposed Service Area exceeds 6,000.

The following chart contains the 2012 linear accelerator utilization for 2012.

Service Area Linear Accelerator Hospital Utilization 2012

Facility	2012 Units	2012 Treatments
Baptist Memorial Hospital-Memphis	2	11,052
Baptist Memorial Hospital-Tipton	1	7,610
Methodist Healthcare-University Hospital	3	23,756
Saint Francis Hospital	2	6,795
*St. Jude's Children's Research Hospital	2	1,437
**Baptist Memorial Hospital-DeSoto MS.	1	10,152
Total	11	60,802

Source: *HSDA Equipment Registry and Applicant Information*

The applicant excluded St Jude's volume from the total number of procedures due to the uniqueness of their patient population and Baptist DeSoto due to its location

in Mississippi.

The total number of procedures per unit was 6,596 excluding St. Jude and Baptist DeSoto.

- b. For Linear Accelerators dedicated to performing only SRT procedures, need in a proposed Service Area shall be demonstrated if the average annual number of MRT procedures performed by existing Linear Accelerators dedicated to performing only SRT procedures in a proposed Service Area exceeds 300, based on a full capacity of 500 annual procedures.

This criterion is not applicable.

- c. For Linear Accelerators dedicated to performing only SRT/SBRT procedures, need in a proposed Service Area shall be demonstrated if the average annual number of MRT procedures performed by existing Linear Accelerators dedicated to performing only SRT/SBRT procedures in a proposed Service Area exceeds 510, based on a full capacity of 850 annual procedures.

This criterion is not applicable.

- d. Need for a new Proton Beam MRT Unit: Due to the high cost and extensive service areas that are anticipated to be required for these MRT Units, an applicant proposing a new Proton Beam MRT Unit shall provide information regarding the utilization and service areas of existing or planned Proton Beam MRT Units' utilization and service areas (including those that have received a CON), if they provide MRT services in the proposed Service Area and if that data are available, and the impact its application, if granted, would have on those other Proton Beam MRT Units.

This criterion is not applicable.

- e. An exception to the need standards may occur as new or improved technology and equipment or new diagnostic applications for MRT Units develop. An applicant must demonstrate that the proposed MRT Unit offers a unique and necessary technology for the provision of health care services in the proposed Service Area.

This criterion is not applicable.

3. Access to MRT Units.

- a. An MRT unit should be located at a site that allows reasonable access for residents of the proposed Service Area.

More than 90% of the patients currently seeking LINAC services at Methodist Healthcare-Memphis Hospitals and at Methodist Radiation Oncology Center originate from the applicant's designated service area. The majority (73%) of the population is in Shelby County; a 45-minute drive time radius for all Methodist LINACS.

- b. An applicant for any proposed new Linear Accelerator should document that the proposed location of the Linear Accelerator is within a 45 minute drive time of the majority of the proposed Service Area's population.

The majority (73%) of the population is in Shelby County; a 45-minute drive time radius for all Methodist LINACS.

- c. Applications that include non-Tennessee counties in their proposed Service Areas should provide evidence of the number of existing MRT units that service the non-Tennessee counties and the impact on MRT unit utilization in the non-Tennessee counties, including the specific location of those units located in the non-Tennessee counties, their utilization rates, and their capacity (if that data are available).

The only other LINAC unit in the service area is located in DeSoto County, Mississippi. This LINAC performed 10,152 procedures in 2012.

4. Economic Efficiencies. All applicants for any proposed new MRT Unit should document that lower cost technology applications have been investigated and found less advantageous in terms of accessibility, availability, continuity, cost, and quality of care.

The applicant investigated alternate services and technology but found no lower cost alternative that delivers the accuracy and reliability of the selected LINAC.

5. Separate Inventories for Linear Accelerators and for other MRT Units. A separate inventory shall be maintained by the HSDA for Linear Accelerators, for Proton Beam Therapy MRT Units, and, if data are available, for Linear Accelerators dedicated to SRT and/or SBRT procedures and other types of MRT Units.

The applicant assures HSDA that all data requested to maintain the Equipment registry will be submitted within the expected time frame.

6. Patient Safety and Quality of Care. The applicant shall provide evidence that any proposed MRT Unit is safe and effective for its proposed use.
 - a. The United States Food and Drug Administration (FDA) must certify the proposed MRT Unit for clinical use.

The proposed new unit has been certified by the FDA for clinical use.

- b. The applicant should demonstrate that the proposed MRT Units shall be housed in a physical environment that conforms to applicable federal standards, manufacturer's specifications, and licensing agencies' requirements.

The architect for the project confirmed in a letter located in Attachment C: Economic Feasibility (1) (d), that all standards, specifications, and licensing requirements will be met.

- c. The applicant should demonstrate how emergencies within the MRT Unit facility will be managed in conformity with accepted medical practice. Tennessee Open Meetings Act and/or Tennessee Open Records Act.
 - d. The applicant should establish protocols that assure that all MRT Procedures performed are medically necessary and will not unnecessarily duplicate other services.

The applicant has clinical technicians on premises trained in life support while the patient is being treated. In the event of cardiac or respiratory arrest, trained staff

will initiate basic life support while the patient is emergently removed for transport to Methodist Germantown Hospital.

- e. An applicant proposing to acquire any MRT Unit shall demonstrate that it meets the staffing and quality assurance requirements of the American Society of Therapeutic Radiation and Oncology (ASTRO), the American College of Radiology (ACR), the American College of Radiation Oncology (ACRO) or a similar accrediting authority such as the National Cancer Institute (CNI). Additionally, all applicants shall commit to obtain accreditation from ASTRO, ACR or a comparable accreditation authority for MRT Services within two years following initiation of the operation of the proposed MRT Unit.

Methodist meets all staffing and quality assurance requirements and will obtain accreditation by the American College of Radiology (ACR) for this site within the first two years of operation.

- f. All applicants should seek and document emergency transfer agreements with local area hospitals, as appropriate. An applicant's arrangements with its physician medical director must specify that said physician be an active member of the subject transfer agreement hospital medical staff.

Emergencies will be transported to Methodist Germantown Hospital.

- g. All applicants should provide evidence of any onsite simulation and treatment planning services to support the volumes they project and any impact such services may have on volumes and treatment times.

The CT simulator from Methodist Radiation Oncology will be relocated the the proposed center to support both LINACS.

- 7. The applicant should provide assurances that it will submit data in a timely fashion as requested by the HSDA to maintain the HSDA Equipment Registry.

The applicant ill submit data in a timely manner.

- 8. In light of Rule 0720-11.01, which lists the factors concerning need on which an application may be evaluated, and Principle No. 2 in the State Health Plan, "Every citizen should have reasonable access to health care," the HSDA may decide to give special consideration to an applicant:

- a. Who is offering the service in a medically underserved area as designated by the United States Health Resources and Services Administration;

The hospital is not located in a designated IMU but there are designated areas within the applicant's service area that are deemed underserved. In Shelby County, 59 census tracts are deemed underserved. In the remaining service area counties, Fayette, Tipton, DeSoto, Marshall and Crittenden counties are underserved.

- b. Who is a "safety net hospital" or a "children's hospital" as defined by the Bureau of TennCare Essential Access Hospital payment program; or

This criterion is not applicable.

- c. Who provides a written commitment of intention to contract with at least one TennCare MCO and, if providing adult services, to participate in the Medicare program.

The applicant is Medicare and Medicaid certified and has contract with BlueCross Blue Shield and United Healthcare.